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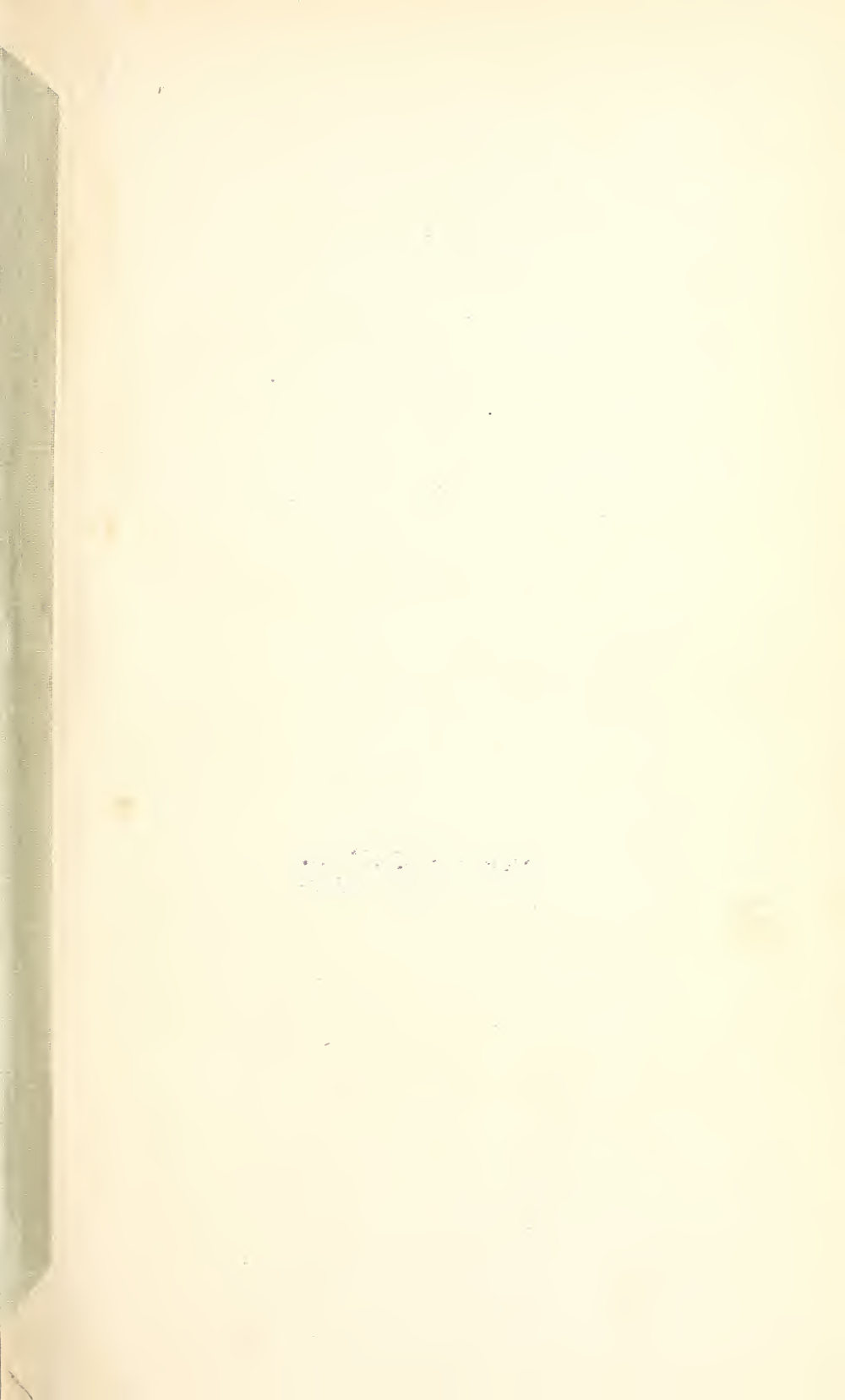
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REPORT

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COMMISSIONER OF EDUCATION

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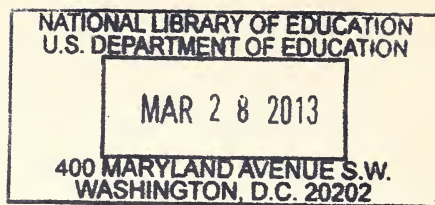
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THE UNITED STATES
BUREAU OF EDUCATION,

Created as a Department March 2, 1867.

Made an Office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,

March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,

March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, LL. D.,

August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,

September 12, 1889, to date.



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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., October 2, 1905.

SIR: I have the honor to submit herewith the Annual Report of this Office for the year ending June 30, 1904.

The enrollment in schools and colleges, public and private, during the year 1903-4 was 17,896,890, the same being an increase of 357,422 pupils over the previous year. Of this number there were enrolled in public institutions supported by taxation and funds belonging to States and municipalities 16,379,443 pupils, as against 16,127,739, the number reported for the previous year. The quota from private institutions corresponding in character to these was 1,517,447. Besides the enrollment in schools and colleges, public and private, there were pupils enrolled in special institutions more or less scholastic in their character and more or less of a practical business character, as follows:

Enrollment in special schools in the United States in 1903-4.

Grade.	Number of pupils.		
	Public.	Private.	Total.
City evening schools.....	270,692	.....	270,692
Business schools.....	.....	138,363	138,363
Reform schools.....	33,871	.....	33,871
Schools for the deaf.....	11,760	507	12,267
Schools for the blind.....	4,236	.....	4,236
Schools for the feeble-minded.....	14,897	698	15,595
Government Indian schools.....	29,161	.....	29,161
Indian schools (Five Civilized Tribes).....	13,727	.....	13,727
Schools in Alaska supported by the Government.....	2,257	.....	2,257
Schools in Alaska supported by incorporated municipalities (estimated).....	2,000	.....	2,000
Orphan asylums and other benevolent institutions (estimated).....	.....	15,000	15,000
Private kindergartens (estimated).....	.....	105,932	105,932
Miscellaneous (including schools of music, oratory, elocution, cookery and various special arts) (estimated).....	.....	50,000	50,000
Total for United States.....	382,001	310,500	693,101

Adding the enrolled of these special schools (693,101) to the total of schools, public and private (17,896,890), giving general education, we have a grand total of 18,589,991.

TABLE I.—Common school statistics of the United States.

I.—General statistics.									
	1869-70.	1879-80.	1889-90.	1898-99.	1899-1900.	1900-1901.	1901-2.	1902-3, ^a	1903-4, ^a
Total population.....	b 38,558,371	b 50,155,783	b 62,622,250	c 74,178,966	b 75,002,515	c 77,274,967	c 78,576,436	c 79,900,389	c 81,241,246
Persons 5 to 18 years of age.....	b 12,055,443	b 15,065,767	b 18,543,201	c 21,000,070	b 21,404,322	c 21,908,636	c 22,278,093	c 22,655,001	c 23,028,748
Pupils enrolled (duplicates excluded).....	6,871,522	9,867,505	12,732,581	15,176,219	13,503,110	15,702,517	15,917,385	16,009,361	16,256,038
Per cent of total population enrolled.....	17.82	19.07	20.32	20.32	20.51	20.32	20.26	20.04	20.01
Per cent of persons 5 to 18 years of age enrolled.....	57.00	65.50	68.61	71.46	72.43	71.67	71.45	70.67	70.59
Average daily attendance.....	4,077,347	6,144,143	8,153,635	10,328,306	10,632,772	10,716,004	11,064,164	11,054,502	11,318,256
Relation of same to enrollment (per cent).....	130.3	142.3	134.4	148.1	144.3	148.2	149.5	149.2	149.6
Average length of school term (days).....	132.2	130.3	132.7	143.0	144.3	143.7	146.7	147.2	146.7
Total number of days attended by all pupils.....	539,063,423	800,719,370	1,098,232,725	1,477,016,244	1,534,822,633	1,539,576,357	1,601,109,702	1,627,406,037	1,660,307,716
Average number of days attended by each person 5 to 18.....	44.7	53.1	59.2	70.0	71.8	70.3	71.9	71.8	72.1
Average number attended by each pupil enrolled.....	78.4	81.1	86.3	97.3	99.0	98.0	100.6	101.7	102.1
Male teachers.....	77,529	122,795	125,525	131,207	126,588	125,838	126,883	117,035	113,744
Female teachers.....	122,986	163,798	238,397	283,065	296,474	306,080	320,936	332,252	341,498
Whole number of teachers.....	200,515	286,593	363,922	414,272	423,062	431,918	441,819	449,287	455,242
Per cent of male teachers.....	38.7	42.8	34.5	31.7	29.9	29.1	27.4	26.0	25.0
Average monthly wages of male teachers ^d			\$45.25	\$46.53	\$46.53	\$47.55	\$49.05	\$49.98	\$50.96
Average monthly wages of female teachers ^d			\$38.14	\$38.93	\$38.14	\$39.17	\$39.77	\$40.51	\$41.54
Number of schoolhouses ^e	116,312	178,222	224,526	244,833	248,279	251,487	254,655	256,789	257,027
Value of all school property.....	\$130,383,008	\$209,571,718	\$342,531,701	\$523,679,966	\$550,069,217	\$572,125,215	\$599,440,384	\$643,903,228	\$685,101,343
II.—Financial statistics.									
Receipts:									
From income of permanent funds and rents.....			\$7,744,765	\$9,007,887	\$9,152,274	\$9,767,110	\$10,022,843	\$12,102,581	\$10,103,093
From State taxes.....			\$26,345,323	\$35,341,064	\$37,886,740	\$36,281,256	\$39,215,910	\$40,455,815	\$42,552,909
From local taxes.....			\$97,222,425	\$144,897,878	\$149,486,845	\$163,897,478	\$173,151,453	\$173,730,858	\$193,216,794
From all other sources.....			\$11,822,262	\$14,090,381	\$23,240,130	\$25,393,493	\$23,107,392	\$25,347,865	\$33,172,139
Total received.....			\$143,194,806	\$203,337,213	\$219,765,989	\$235,339,337	\$245,497,598	\$251,637,119	\$279,133,995
Per cent of total derived from—									
Income of permanent funds and rents.....			5.4	4.4	4.2	4.2	4.1	4.8	3.7
State taxes.....			18.4	17.4	17.2	15.4	16.0	16.1	15.2
Local taxes.....			67.9	71.3	69.0	69.6	70.5	69.0	69.2
All other sources.....			8.3	6.9	10.6	10.8	9.4	10.1	11.9
Expenditures:									
For sites, buildings, furniture, libraries, and apparatus.....			\$26,207,041	\$31,229,308	\$35,450,820	\$39,872,278	\$39,962,863	\$46,289,074	\$49,453,269

For salaries of superintendents and teachers.....	\$27,822,566	\$55,942,972	\$91,836,464	\$129,345,873	\$137,087,746	\$143,378,507	\$151,443,681	\$157,110,108	\$107,824,753
For all other purposes.....			\$22,403,190	\$30,579,416	\$41,826,052	\$44,272,042	\$46,855,755	\$48,058,443	\$55,938,205
Total expended.....	\$63,396,666	\$78,094,687	\$140,506,715	\$200,154,597	\$214,964,618	\$227,522,827	\$238,202,289	\$251,457,625	\$273,216,227
Expenditure per capita of population.....	\$1.64	\$1.56	\$2.24	\$2.70	\$2.84	\$2.94	\$3.03	\$3.15	\$3.36
Expenditure per pupil (of average attendance):									
For sites, buildings, etc.....									
For salaries.....	\$9.28	\$9.10	\$3.21	\$3.03	\$3.33	\$3.72	\$3.61	\$4.19	\$4.37
For all other purposes.....			\$11.26	\$12.52	\$12.95	\$13.38	\$13.09	\$14.21	\$14.83
			\$2.76	\$3.83	\$3.93	\$4.13	\$4.23	\$4.55	\$4.94
Total expenditure per pupil.....	\$15.55	\$12.71	\$17.23	\$19.38	\$20.21	\$21.23	\$21.53	\$22.75	\$24.14
Per cent of expenditure devoted to—									
Sites, buildings, etc.....									
Salaries.....	59.7	71.6	18.6	15.6	16.5	17.5	16.8	18.4	18.1
All other purposes.....			65.4	64.6	64.0	63.0	63.5	62.5	61.4
Average expenditure per day for each pupil (cents):			16.0	19.8	19.5	19.5	19.7	19.1	20.5
For salaries.....	7.0	7.0	8.4	8.8	9.0	9.3	9.5	9.7	10.1
For all purposes.....	11.8	9.7	12.8	13.6	14.0	14.8	14.9	15.5	16.5

^a The figures for this year are subject to correction.^c Estimated.^d Several States are not included in this average.^e Including buildings rented.

Looking at the comparative table above, Table I, it will be seen that the per cent of the population enrolled in the "common schools" (elementary or "district" and high schools) was 20.01, a very slight decrease being noticeable since 1900, when the per cent was 20.51. But the ratio in actual attendance has increased more than enough to make up for the loss in enrollment. And the average number of days' attendance on school by each pupil enrolled was only 78.4 for the year 1870; it reached 86.3 days in 1890, and in 1902 passed the hundred limit (100.6); in 1904 it reached 102.1 days.

The aggregate of school property increased in value \$41,000,000 over the previous year. The average expenditure for school purposes arose to 16½ cents per day of instruction for each pupil, the amount for the previous year being 15½ cents per day.

The following table gives, for the year 1903-4, the Federal, State, and local expenditure for all purposes with some degree of approximation; also the expenditure for the different classes of schools and other institutions of learning. It will be seen that there was expended for education a sum nearly equal to one-half of the cost of the National Government. Of the total amount expended for all public purposes by the States, counties, cities, towns, etc. (\$691,000,000), nearly two-fifths (39.5 per cent) was paid for common schools.

Total disbursements by the United States (as reported by Census Bureau)...	\$725,984,946
Estimated expenditure by States.....	106,000,000
Estimated expenditure by minor civil divisions.....	585,000,000
Total public expenditure.....	1,416,984,946
Expended for common schools (elementary and secondary).....	273,216,227
Approximate expenditure for private schools (elementary and secondary)...	22,000,000
Approximate expenditure for universities and colleges.....	40,000,000
Approximate expenditure for professional schools.....	3,000,000
Approximate expenditure for normal schools.....	6,000,000
Total expenditure for education.....	344,216,227

TABLE II.—*Number of pupils and students of all grades in both public and private schools and colleges, 1903-4.*

NOTE.—The classification of States made use of in the following table is the same as that adopted by the United States census, and is as follows: *North Atlantic Division:* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. *South Atlantic Division:* Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. *South Central Division:* Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, Oklahoma, and Indian Territory. *North Central Division:* Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. *Western Division:* Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

Division.	Pupils receiving elementary instruction (primary and grammar grades). ^b		Pupils receiving secondary instruction (high school grades). ^a		Students receiving higher instruction.										
	Public.	Private (largely estimated).	Public. ^b	Private (in preparatory schools, academies, seminaries, etc.). ^c	In universities and colleges. ^e		In schools of medicine, law, and theology. ^e		In normal schools. ^g				Total higher.		
					Public. ^d	Private.	Public. ^f	Private.	Total.	Public.	Private.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
The United States..	15,620,220	1,200,813	652,804	169,431	44,209	84,552	128,761	10,565	50,659	61,224	51,635	11,992	163,627	106,409	147,203
North Atlantic Division..	3,626,898	439,467	211,304	51,477	5,946	34,957	40,903	339	17,425	17,824	19,421	1,258	20,679	25,766	53,640
South Atlantic Division..	2,291,278	104,271	36,039	23,970	5,767	10,955	16,722	1,532	6,845	8,377	4,250	1,021	5,271	11,549	18,821
South Central Division...	3,185,954	123,235	52,152	29,731	4,227	10,296	14,523	1,192	6,616	7,808	4,446	2,848	7,294	9,865	19,760
North Central Division...	5,595,279	475,060	304,439	51,751	21,845	24,434	46,279	6,623	18,233	24,856	19,614	6,843	26,457	48,082	49,510
Western Division.....	910,821	58,780	48,870	12,502	6,424	3,910	10,334	819	1,540	2,359	3,904	22	3,026	11,147	5,472

^a Including pupils in preparatory or academic departments of higher institutions, public and private, and excluding elementary pupils, who are classed in columns 2 and 3.

^b This is made up from the returns of individual high schools to the Bureau, and is somewhat too small, as there are many secondary pupils outside the completely organized high schools whom there are no means of enumerating.

^c Including colleges for women, agricultural and mechanical (land-grant) colleges, and scientific schools. Students in law, theological, and medical departments are excluded, being tabulated in columns 9-11. Students in academic and preparatory departments are also excluded, being tabulated in columns 4 and 5.

^d Mainly State universities and agricultural and mechanical colleges.

^e Including also schools of dentistry, pharmacy, and veterinary medicine.

^f Mainly in schools or departments of medicine and law attached to State universities.

^g Nonprofessional pupils in normal schools are included in columns 4 and 5.

^h There are, in addition to this number, 23,612 students taking normal courses in universities, colleges, and public and private high schools. (See Chap. XXVIII, vol. 2.)

TABLE II.—*Number of pupils and students of all grades in both public and private schools and colleges, 1903-4—Continued.*

Division.	Summary of pupils by grade.			Summary according to control.		Grand total.	Percent in each grade of the whole number of pupils.			Per cent of public pupils.			Per cent of the total population enrolled in each grade.		
	Elementary.	Secondary.	Higher.	Public.	Private.		Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Total.
1	17	18	19	20	21	22	23	24	25	26	27	28	29	30	32
The United States.	16,821,043	822,235	253,612	16,379,443	1,517,447	17,896,890	93.99	4.59	1.42	92.86	79.40	41.96	20.71	1.01	22.03
North Atlantic Division.	4,076,365	202,781	79,406	3,873,908	544,584	4,418,552	92.26	5.95	1.79	89.22	80.41	32.45	18.12	1.17	19.64
South Atlantic Division.	2,395,549	60,009	30,370	2,338,866	147,062	2,485,928	96.36	2.42	1.22	95.65	60.06	38.03	21.62	.54	22.43
South Central Division.	3,309,189	81,883	29,625	3,247,971	172,726	3,420,697	96.74	2.39	.87	96.28	63.69	33.30	21.71	.54	22.44
North Central Division.	6,070,339	356,190	97,592	5,947,800	576,321	6,524,121	93.05	5.46	1.49	92.17	85.47	49.27	21.74	1.27	23.36
Western Division.	969,001	61,372	16,619	970,838	76,754	1,047,592	92.55	5.86	1.59	93.94	79.63	67.07	21.60	1.37	23.34

The following tables show the trend of the statistics of annual increment of school enrollment and population and the distribution of the increase among elementary, secondary, and higher institutions, public and private.

TABLE IIIa.—*Increase in fourteen years of the total number of persons receiving education and of the total population.*

School year.	Pupils, public and private, of all grades.	Increase over preceding year.	Per cent of increase.	Estimated population.	Increase over preceding year.	Per cent of increase.
1889-90.....	14,512,778			^a 62,622,250		
1890-91.....	14,669,069	156,291	1.08	63,809,588	1,187,338	1.90
1891-92.....	14,714,933	45,864	.31	65,027,377	1,217,789	1.91
1892-93.....	15,083,630	368,697	2.51	66,266,491	1,239,114	1.91
1893-94.....	15,530,268	446,638	2.96	67,537,727	1,271,236	1.92
1894-95.....	15,688,622	158,354	1.02	68,844,341	1,306,614	1.93
1895-96.....	15,997,197	308,575	1.97	70,127,242	1,282,901	1.86
1896-97.....	16,255,093	257,896	1.61	71,445,273	1,318,031	1.88
1897-98.....	16,687,643	432,550	2.66	72,792,617	1,347,344	1.89
1898-99.....	16,738,362	50,719	.30	74,178,966	1,386,349	1.90
1899-1900.....	17,020,710	282,348	1.69	^a 75,602,515	1,423,549	1.92
1900-1901 ^b	17,299,230	278,520	1.64	77,274,967	1,672,452	2.21
1901-2.....	17,460,000	160,770	.93	78,544,816	1,269,849	1.64
1902-3.....	17,539,478	79,478	.46	79,900,389	1,355,573	1.73
1903-4.....	17,896,890	357,412	2.04	81,241,246	1,340,857	1.68
Total increase.....		3,384,112	23.32		18,618,996	29.73
Average.....		241,722	1.51		1,329,928	1.88

^a United States census.

^b Indian Territory added.

TABLE IIIb.—*Per cent of the population receiving education of different grades.*

Grade.	1889-90.		1899-1900.		1903-4.	
	Pupils.	Per cent of population.	Pupils.	Per cent of population.	Pupils.	Per cent of population.
Elementary:						
Public.....	12,494,233	19.95	14,821,969	19.60	15,620,230	19.23
Private.....	1,516,300	2.42	1,240,925	1.64	1,200,813	1.48
Secondary:						
Public.....	221,522	.35	530,425	.70	652,804	.80
Private.....	145,481	.23	188,816	.25	169,431	.21
Higher.....	135,242	.22	238,575	.31	253,612	.31
Total.....	14,512,778	23.17	17,020,710	22.50	17,896,890	22.03

AVERAGE AMOUNT OF SCHOOLING PER INHABITANT.

Tables IVa and IVb show the relative amounts of schooling given in the different census divisions at different periods since 1870, measured by years of 200 days each. For example, the 5.21 years given for 1904 indicate 1,042 days' schooling for each inhabitant if enrollment and attendance should hold the same percentage to population for thirteen years as it held during 1904. Then the number arriving at school age, 6 years, would have attended 1,042 days on the completion of their eighteenth year if their average attendance per year had been the same as the schools of the nation, public and private, reported for 1904. Table IVc shows the estimated average amount of schooling in days at different epochs, beginning with 1800.

TABLE IVa.—Average number of years of schooling (of 200 days each) that each individual of the population received at the different dates specified in the table, taking into account all public and private schooling of whatever grade.

	1870.	1880.	1890.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	^a 1903.	^a 1904.
The United States..	3.36	3.96	4.46	4.99	5.09	5.20	5.09	5.23	5.13	5.18	5.17	5.21
North Atlantic Division..	5.06	5.69	6.05	6.67	6.84	6.95	6.90	6.98	6.95	6.81	6.87	6.89
South Atlantic Division..	1.23	2.22	2.73	3.01	3.07	3.32	3.11	3.26	3.41	3.46	3.46	3.55
South Central Division...	1.12	1.86	2.42	2.87	3.03	3.04	3.09	3.21	3.02	3.11	3.10	3.14
North Central Division...	4.01	4.65	5.36	6.00	6.01	6.15	6.01	6.18	5.97	6.07	6.01	6.01
Western Division.....	3.56	4.17	4.57	5.66	5.90	5.85	5.42	5.53	5.61	5.87	6.07	6.47

^a Subject to correction.TABLE IV^b.—The same, taking into account only the schooling furnished by public elementary and secondary schools.

	1870.	1880.	1890.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	^a 1903.	^a 1904.
The United States..	2.91	3.45	3.85	4.43	4.53	4.63	4.55	4.66	4.57	4.67	4.67	4.60
North Atlantic Division..	4.43	4.84	4.99	5.64	5.78	5.88	5.85	5.91	5.88	5.97	6.00	5.98
South Atlantic Division..	.80	1.90	2.42	2.74	2.79	3.05	2.83	2.95	3.10	3.15	3.18	3.25
South Central Division...	.80	1.57	2.20	2.59	2.75	2.76	2.81	2.91	2.74	2.84	2.85	2.91
North Central Division...	3.71	4.19	4.67	5.35	5.40	5.51	5.41	5.57	5.40	5.51	5.43	5.39
Western Division.....	2.77	3.57	3.98	5.12	5.36	5.34	4.96	4.99	5.01	5.36	5.54	5.85

^a Subject to correction.

TABLE IVc.—Average entire amount of schooling, public and private, since 1800, at different epochs, given in days (partly estimated).

	Days.		Days.
1800.....	82	1870.....	672
1840.....	208	1880.....	792
1850.....	420	1890.....	892
1860.....	434	1904.....	1,042

Universities, colleges, and technological schools (see Chapter XXV, p. 1417).—The number of higher institutions included in this report is 607, with a total teaching staff of 17,559 men and 4,267 women, and 118,029 students. The matter of retiring allowances for aged professors has been brought prominently before the public by the action of Mr. Andrew Carnegie in giving \$10,000,000 as a fund, the income of which is to provide pensions for professors in universities, colleges, and technological schools, without regard to race, sex, or creed. The letter of Mr. Carnegie transferring the fund to a board of trustees, and which contains the general conditions concerning the classes of institutions to which it applies, is given in this chapter. Under the terms of the letter State and denominational institutions are not to share in the fund.

For some years a few of our larger universities have been granting retiring allowances to professors under varying conditions, including Harvard, Princeton, Yale, Columbia, Cornell, the University of California, and Randolph-Macon Woman's College. There may be oth-

ers that have adopted the principle from which no information has been received. The conditions under which allowances are granted vary in the several institutions and are given in the chapter. Another movement for the benefit of college professors is found in the system of sabbatical leaves of absence. Under this system a professor becomes entitled to a leave of absence one year out of seven, usually on half pay. In many cases the leave is spent for the purpose of study, usually abroad, and the institution as well as the professor shares, therefore, in the benefit derived from such leave. At the University of Illinois such leave is granted only on condition that it be spent in study.

The number of students in attendance at these institutions shows a considerable increase over the number for the preceding year. The number of undergraduate and resident graduate students from 1889-90 to 1903-4 is as follows:

Number of undergraduate and resident graduate students in universities, colleges, and schools of technology from 1889-90 to 1903-4.

Year.	Universities and colleges for men and for both sexes.		Colleges for women. Division A.	Schools of technology.		Total number.	
	Men.	Women.	Women.	Men.	Women.	Men.	Women.
1889-90.....	38,056	8,075	1,979	6,870	707	44,926	10,761
1890-91.....	40,089	9,439	2,265	6,131	481	46,220	12,185
1891-92.....	45,052	10,390	2,636	6,131	481	51,163	13,507
1892-93.....	46,689	11,489	3,198	8,616	843	55,305	15,530
1893-94.....	50,297	13,144	3,578	9,517	1,376	59,814	18,098
1894-95.....	52,586	14,298	3,667	9,467	1,106	62,053	19,071
1895-96.....	56,556	16,746	3,910	8,587	1,065	65,143	21,721
1896-97.....	55,755	16,536	3,913	8,907	1,094	64,662	21,543
1897-98.....	58,407	17,765	4,416	8,611	1,289	67,018	23,470
1898-99.....	58,467	18,948	4,593	9,038	1,339	67,505	24,880
1899-1900.....	61,812	20,452	4,872	10,347	1,440	72,159	26,764
1900-1901.....	65,069	21,468	5,260	10,403	1,151	75,472	27,879
1901-2.....	66,325	22,507	5,549	11,808	1,202	78,133	29,258
1902-3.....	69,178	24,863	5,749	13,216	1,124	82,394	31,736
1903-4.....	71,817	24,413	6,341	14,189	1,269	86,006	32,023

The number of students in technical courses of study, especially in engineering lines, is increasing very rapidly, and additional courses in those lines are being constantly established. Foreign countries are well represented in the institutions of this country, the catalogues showing the presence of 2,673 foreign students. The number from the several countries is given in a tabular statement in this chapter. From British North America there came 614; Mexico, 308; Cuba, 245; Japan, 236; Porto Rico, 105; China, 93.

Graduate work at the leading universities is expanding very rapidly. A comparative statement including ten universities shows that modern languages attract the largest number of graduate students, followed in the order of their popularity by history and political science, philosophy (including pedagogy), ancient classics, chemistry, mathematics, botany, physics, geology, etc.

The value of all property amounts to \$465,216,545, an increase of almost \$33,000,000 in one year. The income amounted the past year to \$40,329,193 and the benefactions to \$13,700,559. Of the total income \$9,922,903 were received from States and municipalities. The chapter shows that in nine States and two Territories a general property tax is levied for the benefit of the institutions for higher education.

The total number of degrees conferred in 1903-4 was 18,174; A. B. degrees, 5,902 on men, 3,372 on women; B. S., 3,238 on men, 437 on women; A. M., 1,010 on men, 279 on women.

The movement inaugurated several years ago for the granting of but one degree (A. B.) for the completion of any course of liberal studies is still in progress. Seven institutions reported during the year the discontinuance of all degrees except A. B.

Of 301 Ph. D. degrees 272 were conferred on men and 29 on women; Harvard conferred 46, Yale 39, Johns Hopkins 31, Chicago 30, and Columbia 28. In addition, 5 honorary Ph. D. degrees were conferred by three institutions (three by Austin College).

Agricultural and mechanical colleges (See Chapter XXVI, p. 1545).—The statistics contained in this chapter have been compiled from the annual reports required to be made by these institutions to the Secretary of the Interior under the act of Congress approved August 30, 1890, and show continued growth and expansion in all lines of work. The courses in agriculture are becoming more specialized, and new courses in engineering lines are being constantly established.

These institutions were established under the land-grant act of July 2, 1862, and the income-producing funds derived from the sale of the lands amount now to \$11,737,316, only the income of which may be expended. Under the act of August 30, 1890, each State and Territory now receives annually \$25,000 from the General Government for the benefit of these institutions. The total amount paid out under this act from its passage up to and including the installment for the year ended June 30, 1904, is \$15,202,000. The reports of the treasurers for the year show that the funds received under the act of August 30, 1890, were expended as follows: For instruction in agriculture, 16.8 per cent; mechanic arts, 29.5 per cent; English language, 12.3 per cent; mathematical science, 11.8 per cent; natural and physical science, 23.4 per cent; economic science, 6.2 per cent.

A gratifying feature noted in the reports of the institutions is the largely increased aid granted them by the several States and Territories. This aid amounted for the year to \$5,654,758, an increase of more than a million dollars over the amount for the preceding year.

The total number of students in attendance was 53,161, of which

number 6,726 were enrolled in separate institutions for colored students.

The chapter gives the legislation enacted during the year in behalf of the institutions, changes in courses of study, descriptions of new buildings erected during the year, and a compilation showing the courses of study maintained by the several institutions.

Secondary schools (Chapter XXIX, pp. 1727-2055).—The statistics of the current year show a total of 8,836 schools engaged in secondary instruction. Of this number, 7,230 are public and 1,606 private institutions. The number of students enrolled in the former was 635,808, and in the latter 103,407. In addition to these numbers, which cover enrollment in the regularly constituted secondary schools alone, 16,999 pupils in public and 66,024 in private colleges and other institutions having preparatory departments received instruction in secondary branches during the year, making a grand total of 822,235. This latter sum represents about 1,010 to the 100,000 of estimated population. Of this number, 800 are in public and 210 in private institutions, an increase in the last fifteen years of 440 for the former and a decrease of 20 for the latter. A total of 87,724 graduates from public and private high schools is reported. This constitutes 11.87 per cent of the total enrollment, a ratio which has remained nearly uniform for the last fifteen years.

From a somewhat extensive canvass of the question in 1903 the conclusion was reached that the proportion of secondary students enrolled during the school year in the four classes of the high school course, public and private, is as follows: Forty-three per cent in the first year; 26 per cent in the second year; 18 per cent in the third year; 13 per cent in the fourth year; more than 11 per cent graduating.

Students receiving secondary instruction in public and private high schools and academies and in preparatory departments of colleges and other institutions.

	1902-3.			1903-4.			Per cent of increase or decrease.		
	Public.	Private.	Total.	Public.	Private.	Total.	Public.	Private.	Total.
United States.....	608,412	168,223	776,635	652,804	169,431	822,235	7.30	0.72	5.87
North Atlantic Division....	198,843	51,751	250,594	211,304	51,477	262,781	6.27	a 0.53	4.86
South Atlantic Division....	32,879	24,255	57,134	36,039	23,970	60,009	9.61	a 1.18	5.03
South Central Division.....	48,573	30,504	79,077	52,152	29,731	81,883	7.37	a 2.53	3.55
North Central Division.....	286,143	49,119	335,262	304,439	51,751	356,190	6.39	5.36	6.24
Western Division.....	41,974	12,594	54,568	48,870	12,502	61,372	16.43	a 0.73	12.47

a Decrease.

The decline in the proportion of secondary students preparing for college in the last twelve years in both public and private high schools is worthy of comment. In 1892-93 the percentage of students preparing for college in public high schools was 14.60; in 1903-4 the

percentage was 9.54. The percentages corresponding to these in private high schools are 26.50 and 21.47.

City school systems (Chapter XXIV, pp. 1305-1415).—City school systems, on the whole, are among the most highly organized of all the agencies contributing to the education of the masses of our people. Their evolution from the simple village schools of earlier times to the complex systems of the present, embracing, in addition to those departments dealing directly with instruction, numerous departments having to do with organization, administration, and maintenance, whereby the systems as a whole may effectually subserve the purpose of their being, well merits careful study.

The tables given in this chapter contain the statistics of 1,212 incorporated places of a population of 4,000 and upward. The total enrollment in day schools in these places for the current year was 5,078,664, which number constitutes 31.2 per cent of the entire enrollment in the common schools of the nation. The value of school property as reported for the year was \$423,253,680, and the total amount expended for all purposes was \$129,836,203; these numbers represent 61.8 per cent and 47.5 per cent, respectively, of the corresponding items for the common schools of the nation. The figures of enrollment, as given above, relate to day schools alone. In the evening schools, maintained as organic parts of city systems of instruction, were enrolled the current year 270,692 pupils, requiring for their instruction 6,318 different teachers. Out of the 178 cities of the first class (population 8,000 and upward), which maintain evening schools, 127 are situated in the North Atlantic States, where industrial activities assume largely the form of manufacturing. An increase in the enrollment in evening schools in 1904 over the year 1903 of 18.1 per cent, and an increase in the number of cities maintaining evening schools from 158 to 178, are noted.

DISTRIBUTION OF PUPILS IN THE SEVERAL GRADES.

The chapter on city schools in the Report for 1898 (Chapter XLVII) contained a series of tables showing the enrollment in the several school grades in 24 representative cities. The tables below present practically the same data for the present year, but include a larger number of cities.

Enrollment by grades or year's work in elementary schools (58 cities of 8,000 and over).

Grade.	Enrollment.	Percent.
First.....	350,116	20.7
Second.....	279,938	16.6
Third.....	266,300	15.8
Fourth.....	238,051	14.1
Fifth.....	201,447	11.9
Sixth.....	155,275	9.2
Seventh.....	114,269	6.8
Eighth.....	83,240	4.9
Total.....	1,688,636	100.0

Enrollment by grades or years, elementary and secondary (46 cities of 8,000 and over).

Year.	Enroll- ment.	Percent.
First.....	196,506	19.8
Second.....	144,895	14.6
Third.....	136,298	13.7
Fourth.....	124,196	12.5
Fifth.....	106,795	10.8
Sixth.....	95,796	9.7
Seventh.....	65,075	6.6
Eighth.....	49,139	5.0
Ninth (first year of high school).....	32,665	3.3
Tenth (second year of high school).....	18,976	1.9
Eleventh (third year of high school).....	12,715	1.3
Twelfth (fourth year of high school).....	8,232	.8
Total.....	991,291	100.0

The summary below exhibits the present status of schools in cities of 8,000 inhabitants and upward as compared with their condition for 1902-3.

Summary of statistics of cities containing over 8,000 inhabitants, showing increase from previous year.

	1902-3.	1903-4.	Increase.	Increase, per cent.
Number of city school systems.....	587	588	1	0.17
Enrollment.....	4,270,473	4,374,463	103,990	2.43
Aggregate number of days attendance.....	609,811,464	630,662,688	20,851,224	3.42
Average daily attendance.....	3,249,554	3,354,806	105,252	3.24
Average length of the school term in days.....	187.7	187.9	0.2	.11
Enrollment in private and parochial schools.....	967,535	1,006,552	39,017	4.03
Male supervising officers.....	2,660	2,799	139	5.23
Female supervising officers.....	2,713	2,820	107	3.94
Whole number of supervising officers.....	5,373	5,619	246	4.58
Number of male teachers.....	7,274	7,289	15	.26
Number of female teachers.....	86,782	89,335	2,553	2.94
Whole number of teachers.....	94,056	96,624	2,568	2.73
Number of buildings.....	9,853	10,069	216	2.19
Number of seats.....	4,092,077	4,151,938	59,861	1.46
Value of school property.....	\$380,437,679	\$410,326,526	\$29,888,847	7.86
Expenditure for salaries of supervisors and teachers.....	\$70,183,871	\$74,332,482	\$4,148,611	5.91
Total expenditure.....	\$122,233,724	\$129,836,203	\$7,602,479	6.22

Normal schools (Chapter XXVIII, pp. 1667-1725).—The statistics of the present year embodied in this chapter show in all the schools devoted partially or wholly to the professional training of teachers an enrollment of 87,239. These students are distributed among the several classes of institutions as follows: In public normal schools, 59.2 per cent; in private normal schools, 13.7 per cent; in universities and colleges, 11.6 per cent; in public high schools, 8.6 per cent; in private high schools, 6.9 per cent. There were reported as engaged in this work 1,220 institutions. Of this number, 449 are public and 272 private high schools, 230 universities and colleges, 178 public and 91 private normal schools. These, in the main, constitute the sources of supply from which all classes of schools recruit their required quotas of teachers. The ratio of women students to the whole number of students is found to be 65.8 per cent, a figure somewhat less than the ratio which women teachers bear to

all teachers as determined on the basis of last year's statistics. This latter ratio, including universities and colleges, was 71.5 per cent.

The two summaries below present, respectively, the status of public and of private normal schools for 1889-90 and 1903-4, and public appropriations to public normal schools for each of the last fifteen years.

	1889-90.				1903-4.			
	Schools.	In-struct-ors.	Normal stu-dents.	Normal gradu-ates.	Schools.	In-struct-ors.	Normal stu-dents.	Normal gradu-ates.
Public normal schools.....	135	1,182	26,917	4,413	178	2,845	51,635	9,230
Private normal schools.....	43	274	7,897	824	91	668	11,992	1,618
Total.....	178	1,456	34,814	5,237	269	3,514	63,627	10,848

Public appropriations to public normal schools for fifteen years.

Year.	For sup-port.	For build-ings.	Year.	For sup-port.	For build-ings.
1889-90.....	\$1,312,419	\$900,533	1897-98.....	\$2,566,132	\$417,866
1890-91.....	1,285,700	409,916	1898-99.....	2,510,934	560,896
1891-92.....	1,567,082	394,635	1899-1900.....	2,709,003	718,507
1892-93.....	1,452,914	816,826	1900-1.....	3,068,485	709,217
1893-94.....	1,996,271	1,583,399	1901-2.....	3,228,090	906,301
1894-95.....	1,917,375	1,003,933	1902-3.....	3,582,168	1,268,742
1895-96.....	2,187,875	1,124,834	1903-4.....	3,927,808	915,443
1896-97.....	2,426,185	743,333			

Length of service of teachers.—Chapter XXIII (pp. 1227-1302) contains tables giving the results of an inquiry into the length of service of teachers in the common schools of 379 cities and towns of 8,000 inhabitants or over. These tables show the number of teachers having taught from one to forty years and over. It appears that 30.75 per cent of the total number of teachers have taught less than five years; 25.48 per cent have taught from 5 to 10 years; 17.31 per cent have taught from 10 to 15 years; 11.21 per cent have taught from 15 to 20 years; 6.68 per cent have taught from 20 to 25 years; 4.29 per cent have taught from 25 to 30 years; 2.44 per cent have taught from 30 to 35 years, the period which in continental Europe usually entitles to retirement at four-fifths of the last year's salary; 1.82 per cent have taught from 35 years to 40 years and over, a period which in Europe entitles to retirement at full salary. The number of teachers of long service, say 20 years and over, is over 15 per cent of the total number reported.

The average length of service, regardless of where performed, proves to be 14.7 years for men and 11.1 years for women. Cincinnati has the highest average—namely, 16.8 years for both sexes. Boston follows with 15.3 years, while St. Joseph, Mo., records the lowest average, to wit, 9.2 years.

The following table gives the summarized percentages of the tables of Chapter XXIII. To facilitate calculations the percentages are also grouped in five-year periods.

Length of service of teachers.	Teachers in 333 cities of over 8,000 inhabitants, regardless of where service was rendered.	Figures of column 1 in periods of 5 years.	Teachers in 379 cities of over 8,000 inhabitants, service rendered in present location.	Figures of column 3 in periods of 5 years.	Teachers in 29 cities of over 100,000 inhabitants, regardless of where service was rendered.	Figures of column 5 in periods of 5 years.
	1	2	3	4	5	6
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1 year or less.....	6.483		13.241		6.457	
2 years.....	5.733		9.681		5.448	
3 years.....	6.195		8.136		5.688	
4 years.....	6.362		7.246		5.848	
5 years.....	5.977	30.750	6.345	44.649	5.181	28.622
6 years.....	5.632		5.337		5.070	
7 years.....	5.575		4.957		5.367	
8 years.....	5.178		4.460		4.914	
9 years.....	4.530		4.046		4.407	
10 years.....	4.570	25.485	3.656	22.456	4.100	23.858
11 years.....	3.782		3.216		3.833	
12 years.....	3.947		3.236		3.896	
13 years.....	3.336		2.790		3.367	
14 years.....	3.322		2.623		3.402	
15 years.....	2.929	17.316	2.303	14.170	2.842	17.370
16 years.....	2.479		1.805		2.455	
17 years.....	2.366		1.738		2.468	
18 years.....	2.119		1.566		2.219	
19 years.....	1.981		1.386		2.060	
20 years.....	2.265	11.210	1.526	8.023	2.353	11.585
21 years.....	1.638		1.178		1.854	
22 years.....	1.472		1.066		1.610	
23 years.....	1.246		.889		1.525	
24 years.....	1.157		.788		1.276	
25 years.....	1.171	6.684	.757	4.678	1.210	7.475
26 years.....	1.071		.735		1.468	
27 years.....	.910		.620		1.196	
28 years.....	.734		.492		.867	
29 years.....	.713		.539		.929	
30 years.....	.863	4.291	.606	2.992	.903	5.363
31 years.....	.615		.473		.747	
32 years.....	.510		.435		.667	
33 years.....	.504		.385		.671	
34 years.....	.442		.348		.618	
35 years.....	.372	2.443	.263	1.904	.445	3.148
36 years.....	.308		.208		.436	
37 years.....	.251		.178		.382	
38 years.....	.206		.147		.271	
39 years.....	.191		.142		.267	
40 years and over.....	.865	1.821	.453	1.128	1.223	2.579
	100.000	100.000	100.000	100.000	100.000	100.000

Pensions for university professors.—Chapter III (pp. 133–247) contains a compilation of rules and regulations relating to pensions and annuities paid to professors of German universities. The question of providing pensions for teachers has of late years assumed an importance in this country not anticipated twenty years ago. The munificent gift of \$10,000,000 for the establishment of a pension fund for college professors by Mr. Andrew Carnegie attracts public attention as this report goes to press. In large cities private initiative among teachers has done much in securing small annuities to superannuated or disabled teachers, and city authorities have lent their official aid to these efforts. In some States the legislatures have readily responded to the request of teachers and framed laws for the

establishment of pension funds, the distinctive feature of which, however, is that no teacher shall be obliged to contribute to the pension fund, voluntary membership being a requisite of any pension-fund society. This is quite in harmony with our democratic form of government, while in Germany membership is compulsory; i. e., membership in any teaching body means, *nolens volens*, the payment of regular contributions to the pension fund of that body except in elementary schools, where the State assumes the entire burden of pension payment.

In the United States only three States have provisions for teachers' pensions paid by the State, to wit, Maryland, Ohio, and New Jersey (see pp. 2449-2451 of Annual Report of 1903), while Germany has been for generations in a preeminent degree the country of civil-service pensions. The timely gift by Dr. Theodore Marburg, of Johns Hopkins University, of a manuscript to this Office makes possible an exhibit of the regulations in force in the twenty-one German universities with reference to pensions for professors and provision for their widows and orphans. The author of this compilation starts with the provisions for support of professors and their families in the ten Prussian universities; then follow those of Alsace, Bavaria, Wurtemberg, Saxony, Baden, Hesse, Thuringia, and Mecklenburg in the order named. Many points usually overlooked in establishing new pension funds are found here well met by provisions which are evidently the result of long and vexatious experience. The sums granted to retired professors, to widows of professors, and to their orphans may not seem large for America, but they may be weighty considerations for a professor in deliberating upon a call to another institution of learning. It may be stated that in all the many years of administration of these pension funds in Germany no case of default has occurred.

Teachers' salaries.—The first question of interest to the teacher inquiring about salaries is: Are the positions of teachers, in a State, annual positions, or merely temporary occupations lasting only for a small fraction of the year? The annual position means a teacher employed by the year, who takes up teaching as a vocation, and does not have to shift to other occupations to eke out his salary received from his vocation as teacher.

In most rural districts that are sparsely settled the taxable wealth is small, and the State does not make an apportionment of its annual funds sufficient, when divided pro rata for each person of school age, to provide for a full school year's instruction; instead of nine or ten months, instruction for only three or four, or five months possibly, is provided. Consequently the individual teacher has to find his main vocation in some other occupation than teaching—generally that of a farmer. The ungraded rural school can not afford to employ pro-

fessional teachers, because it can pay only a fragment of an annual salary.

Villages and cities can depend upon a school appropriation for the year, and an annual session of from eight to ten months, or even longer, is kept up. Professional teachers are employed at living wages; that is to say, the wages paid teachers are in advance of the average rates for laborers who work the same length of time.

The second important question is: How many well-paying positions are there—how many positions are there in the teachers' ranks which promise the individual, successful in his profession of teacher, an increase above the position he at present occupies, say to a salary one-fourth larger, or one-half larger; how many positions will become open to him that pay twice or three times or four times what he receives now when he first enters the profession? The ambitious teacher wishes to have a career before him. Just as he objects to enter the work of teaching when teaching is a makeshift, lasting only three or four months each year, so it is objectionable, though not to such a degree, to enter a profession which has in it no future for him.

Pretty much all the interest in statistics of salaries in the United States therefore relates, not to the salaries of rural schools, but to those paid in village or city schools, which are sufficient to support a professional teacher, and to the question whether there are a sufficient number of higher positions to hold out a promise of promotion from time to time in accordance with the increase of his professional skill. He is glad to learn, therefore, that the average annual increase in higher education throws open nearly one thousand new places a year in colleges and universities for teachers promoted from the secondary schools on being found to have the requisite skill and scholarship. There were, in 1890, 7,918 professors and instructors in the colleges and universities of the United States, not counting the professional schools. In 1903 the number had risen to 20,887. It started with less than 8,000, and had an increase of new places in thirteen years almost equal to 1,000 a year (12,969). The secondary schools of the United States were taught by 16,329 teachers in 1890, and in 1903 by 33,795. This increase gave 17,466 new positions in thirteen years for teachers in public and private high schools.

The recent canvass of teachers' salaries by the special committee of the National Educational Association, of which Dr. Carroll D. Wright, formerly the United States Commissioner of Labor, was the chairman, gives us data from which we may complete our list of better-salaried positions, besides those in colleges already named, counting in superintendents, assistant superintendents, high school principals, high school teachers (not principals), elementary school teachers—six classes of positions reported in 467 cities of over 8,000 inhabitants. This list aggregates 53,554 positions with annual sal-

aries of \$600 and over (one-half of which pay \$800 and upward), and 14,193 of \$500 and \$600, and 17,728 of annual salaries below \$500.

The teacher's profession offers, in the elementary and high schools and the office of superintendent, the following positions:

Salaries (dollars).	Positions.	Salaries (dollars).	Positions.
600 to 700.....	16,015	1,400 to 1,500.....	861
700 to 800.....	11,064	1,500 to 1,600.....	766
800 to 900.....	8,664	1,600 to 1,700.....	1,005
900 to 1,000.....	4,424	1,700 to 1,800.....	227
1,000 to 1,100.....	2,539	1,800 to 1,900.....	361
1,100 to 1,200.....	1,486	1,900 to 2,000.....	233
1,200 to 1,300.....	2,825	2,000 and over.....	1,918
1,300 to 1,400.....	1,166		
Total.....			53,554
500 to 600 dollars.....			14,193
Under 500 dollars.....			17,728

Adding the positions in colleges and universities (20,887) to 53,554 positions with salaries of \$600 and above, we have a total of 74,441.

It will be seen, on inspection of the above table, that there are 26,475 positions that pay \$800 and upward, which, with the college positions, make 47,362.

Education at the St. Louis Exposition (see Chapters XIV, XV, XXI, XXII, pp. 863-998 and 1177 to 1275).—Four chapters of this report are devoted to a description of the educational exhibits at the Louisiana Purchase Exposition held in St. Louis, Mo., in 1904. At St. Louis, for the first time in the history of expositions, a separate building was furnished for the display of the exhibits on education and its kindred subject—social economy. The building covered 276,153 square feet and cost \$375,000. In it were arranged nearly all of the educational exhibits.

The four chapters devoted to this subject comprise a series of monographs descriptive of educational exhibits, compiled and edited by Mr. George E. Gay, president of the Educational Exhibitors' Association of the Louisiana Purchase Exposition. The series of monographs was intended to include a description of each separate exhibit, but it was not possible to obtain all of them.

Dr. H. J. Rogers, chief of the department of education at the exposition, points out two features that stood out prominently, namely, the similarity of the exhibits from the several States and cities in the United States, demonstrating the fact that we have a national system of education, and, second, the subordination of the humanities to industrial instruction in the exhibits of foreign nations.

The last monograph in Chapter XV is on the exhibit of the land-grant colleges and agricultural experiment stations. This exhibit was rendered possible by an appropriation of \$100,000 made by Congress for the purpose. It was prepared by a committee of the association of American Agricultural Colleges and Experiment Stations,

and was designed to illustrate the instruction given by the institutions established under act of Congress approved July 2, 1862, in agriculture and the mechanic arts, and the work done by the experiment stations established under the act of March 2, 1887. This collective exhibit occupied about 16,000 square feet of space, and represented on the agricultural side work done in agronomy or plant production, zootechny or animal industry, agrotechny or agricultural technology, rural engineering or farm mechanics, and rural economics of farm management. The mechanic arts side was represented by exhibits illustrating instruction in civil, mechanical, electrical, and mining engineering, technical chemistry, architecture, drawing, and shop practice, including textiles and trades. Instruction in domestic science and ceramics was also represented. The central part of this exhibit was occupied by the exhibits of the Bureau of Education and the Office of Experiment Stations, which represent the United States Government in its relation with these colleges and stations. These exhibits were largely documentary and statistical, intended to show the development of the institutions and stations in respect to numbers, students, material, equipment, etc., and their relation to other educational institutions in the country.

The school systems and exhibits of seven foreign countries are described in Chapter XXII. The organization of the school system of the Argentine Republic is briefly described by a member of the Argentine Commission. Each State manages its schools independently, while the National Government has control over those at the federal capital and in sectional territories. In the city of Buenos Ayres education is compulsory for children between 6 and 14 years of age. Primary instruction comprises six grades covering eight years. Coeducation is allowed only in the first three grades. The exhibit of Argentina was limited to a representation of the work of the schools of the city of Buenos Ayres, and was confined chiefly to a display of statistics, school administration, and pupils' work.

Primary education in Belgium is described by M. A. Genonceaux, chief inspector of primary education. All the elementary communal teaching, including kindergarten, primary, and adult schools, is directed by the communes. The primary school receives children of 6 to 14 years of age. There are in Belgium 18 principal inspectors and 85 cantonal inspectors for a school population of 800,000 children, and about 20,000 teachers of primary schools. Teachers of 55 to 60 years of age are entitled to a retiring pension of about two-thirds of the highest salary they have received. The practical tendency is very prominent in the primary schools. All trades provide their quota of practical exercises, with special reference to local wants. The girl applies her theoretical knowledge to housekeeping and needlework, the boy either to agriculture or to some branch of industry.

The surroundings of the school decide the trend of the practical instruction to be given by the teacher.

In Brazil elementary and secondary education are supported and controlled by the authorities of the federal district and of each State in their respective territories. Higher public education is under the control of the Federal Government, being administered by the secretary of the interior. Schools generally begin in February or March and continue until November or December.

The German educational exhibit covered about 50,000 square feet of space and was divided into five departments: 1, Universities and scientific institutions; 2, Chemistry; 3, Scientific instruments; 4, Medicine; 5, Elementary and advanced education. The exhibit of universities and scientific institutions consisted largely of models, photographs, and books descriptive of the equipment of the institutions. There were also numerous statistical and graphical charts illustrating the work and growth of the institutions. The German exhibit was noted for the large number of books and other printed matter displayed, and the minute and pertinent information on all the subjects of instruction and organization. Its medical exhibit was limited to five departments of medical science, namely, bacteriology, anatomy, surgery, pathological anatomy, and internal medicine, to which was added a Roentgen cabinet furnished with the newest apparatus. The main object of this exhibit was to show the system of medical instruction followed in the German universities and the apparatus used during instruction. The characteristic features of the German school organization are shown in 24 brief tables on pages 1241-1252.

The remarkable advance of Japan in educational lines in recent years was strikingly shown at St. Louis. Education in its modern sense was unknown in Japan prior to the restoration in 1868. An imperial university was established in 1869, and in 1871 educational affairs were entrusted to an independent department of state.

A noticeable feature of the Japanese exhibit was the evidence it gave of the large provision in its school system for technical education. Institutions for technical education are of three grades, higher technical schools, technical schools of secondary grade, and apprentice schools. In these schools are found courses in engineering, agriculture, fishery, commerce, navigation, etc. The statistical table on page 1254 gives the status of educational institutions in Japan in 1901, and shows an enrollment in all classes of schools of 5,265,006. There are two universities in the Empire, with an attendance of 3,612 students.

The organization of the school system of Sweden and its exhibit at St. Louis are described on pages 1270-1275 by Carl Lidman, commissioner to the exposition. Compulsory education in common

schools was introduced in 1842. Common schools are divided generally into two departments, the infant school for beginners and the common school proper for more advanced pupils. School age is counted from the seventh to the fourteenth year. The obligatory period extends through six years, two in the infant school and four in the common school. In 1902 there were 761,814 children of school age. Of this number 94 per cent received instruction in infant and common schools, and 6 per cent in secondary schools, special schools, and in homes. Instruction in sloyd and in domestic economy is given in the common schools.

State school laws.—In Chapter IV is given a revised digest of the school laws of the various States. The next previous compilation of this kind was published in Chapter IX of the Annual Report for 1894. The matter is arranged under four heads, viz: (1) The organization of the school system in each State, including the superintendents and other officers and the division into districts; (2) the teachers, their methods of appointment, their training and duties; (3) the schools, including attendance and studies; and (4) the financial support of the schools.

Statistics of growth.—Chapter II (pp. 25-132) gives in detail the measurements of the school children of Worcester, Mass., made by Prof. Franz Boas with the assistance of a number of students of Clark University. The large number of particulars recorded in the case of each child, and the care with which the work was conducted, render this collection of data peculiarly valuable.

The tables of measurements are preceded by a preliminary investigation of some problems bearing upon the growth of children, the treatment of which at the same time illustrates the methods of reducing observations of this character and discussing the results arrived at. In the prosecution of this study Doctor Boas has had the cooperation of Dr. Clark Wissler, and besides his own measurements makes use of data from other reliable sources. In particular, an attempt is made to correlate the various groups of measurements, so as to determine at what stage of development of children a tendency is shown to vary most from the normal, for all the different measurements to vary in the same direction.

Education in England.—A statistical survey of education in England is given in Chapter XII (pp. 799-833), together with an extended account of the operations of the law of 1902, which effected a radical change in the local administration of elementary education. An epitome of the main provisions of the law comprised in the chapter enables the reader to comprehend the bearing of the year's record. (For full text of the law see Report for 1902, pp. 1017-1026.)

It appears that rapid progress has been made in transferring the local control of the public elementary schools from elected school

boards to the county and municipal councils as required by the law. By this time (1904) the transfer has been completed throughout the country, including the metropolis, which was the subject of a special law (1903) providing for the same administrative change within its area. Confidence is expressed that under the new conditions it will be possible to bring the various agencies of public education into a coordinate whole in each administrative division; in this way overlappings and duplication of schools may be prevented, with a gain in the scope and efficiency of the educational facilities. The local councils, it is reported, are, in general, carrying out their new duties with great energy and with a wise consideration for the various bodies with which they are thus brought into relation. Conflict has arisen in some cases between the councils and the governing bodies of private schools with respect to the limited authority over these schools granted to the councils, but for the most part the questions in dispute have been amicably adjusted.

While on the whole the change in the local administration of the schools has progressed rapidly and smoothly, the financial policy of the law is still bitterly opposed.

Prior to the passage of the law of 1902 sectarian or parochial schools could not draw support from local taxes, but they are now placed in that respect upon the same footing as nonsectarian schools under public control. This provision, at variance with the deep-seated principle in English administration, that public control should follow public funds, has been met by a refusal on the part of thousands of citizens to pay the portion of the school tax that presumably would be applied to sectarian instruction. In Wales this policy of "passive resistance," as it is termed, has taken on a more threatening aspect, the local councils having refused to turn over any part of the school tax for the use of sectarian schools. To meet the case of these recalcitrant authorities a law was passed at the end of the parliamentary session of 1904, the "Local authority default act," which provides "that where the local authority fails to perform its duties as defined by the education law of 1902, the board of education may make orders for recognizing as managers of a school any persons who are acting as managers thereof, and may pay to the managers such amounts as are needed for the expenses of the school and charge the same as a debt due to the Crown from the local authorities." It is evident, however, that the board will be slow to adopt coercive measures, while on the other hand the local authorities may evade the charge of illegal action by "placing their refusal to aid the denominational schools upon the ground of insufficient staff, equipment, etc., which are recognized by the law of 1902 as sufficient reasons for refusing support." The present indications are that the law of 1902 will be substantially modified in the near future, or that the parochial schools through their inability to meet the

legal requirements as to staffing and equipments will gradually pass over to the control of the local authorities. To some extent this transfer has already taken place, as indicated by the fact that the 518 new public schools reported in 1903 comprised 28 schools that had been turned over to the councils by private managers. Of this number, 10 were Church of England schools and 3 Wesleyan. Since the report was rendered the tendency to such action has apparently increased.

In some districts the disturbance caused by the favor shown to parochial schools has interfered with school attendance, but the statistics show on the whole continued increase in the number of enrolled children. The total enrollment rose from 5,881,278 in 1901-2 to 5,975,127 in 1903. In 1890 the school enrollment was 16.3 per cent of the population; in 1902, 18 per cent (population census of 1901). The classification of the pupils by age periods (Table II, p. 806) shows that the increase in recent years (1900-1903) has been greatest in the group of children above 11 years of age, a result attributed to recent legislation restricting more rigidly the employment of children (law of 1899)^a and to the provisions of the education law of 1900 empowering local authorities to extend the upper limit of compulsory school attendance from the thirteenth to the fourteenth year of age.

The development of the compulsory principle in English school legislation is an impressive evidence of its importance, since in no country are parental authority and right of parental control more carefully guarded. The education law of 1870 gave optional power to school boards to make by-laws requiring the attendance at school of children of "not less than five nor more than thirteen years" of age. By reference to the chronological epitome of school legislation (p. 820) it will be seen that this permissive provision has been so extended by succeeding laws that local authorities are now required to make by-laws enforcing school attendance (laws of 1876 and 1880); the age for partial or total exemption from school attendance under local by-laws has been raised as to its lower limit from 11 to 12 years (law of 1899), the candidate for exemption being required to pass an examination in a grade not lower than the fourth (fixed by law of 1893); and local authorities are authorized to extend the upper limit of compulsory school attendance from the thirteenth to the fourteenth year of age (law of 1900). It is interesting to compare the gradual development of this policy in England with the early adoption of compulsion in Scotland. The law of 1872 organizing the present system of education in the northern division of the Kingdom made education compulsory for all children between the ages of 5 and 13; in 1883 the upper age limit was raised to 14. As in England, exemption from school attendance, partial or total, is allowed at 12 years of age under

^a By a clerical error the date of this law is given as 1889 instead of 1899 on page 806, near the foot.

certain conditions, but in Scotland applicants for exemption must be able to pass examination in the studies of the fifth grade (law of 1878, see pp. 820-821).

The statistics with respect to the teaching force in English elementary schools show a steady increase in the proportion of adult teachers. They formed 90 per cent of the entire force in 1899-1900 and 95 per cent in 1902-3. The increase in the proportion of certificated teachers is also noticeable. In 1876 they comprised 39 per cent of the entire body of teachers. In 1899 the proportion had risen to 50.9 per cent and in 1902-3 to 53.2 per cent.

The adjustment of teachers' salaries is one of the most serious problems with which the local councils have to deal. In London and other great industrial cities there is an actual dearth of teachers, attributed in the main to the superior salary inducements offered by other careers; in the rural districts the meager salaries offered, combined with certain limitations growing out of the relation of teachers to private managers (the majority of the rural schools are parochial), make it difficult to secure well-qualified teachers. The average salaries increase steadily, as shown in Table VII (p. 809), but the average is affected by the increase in the number of higher positions in the chief cities and conceals wide divergencies from a fair living income.

The current expenditure for elementary schools so far as reported amounted for the year 1902-3 to £16,462,456 (\$82,312,280). Of this amount £6,243,692 (\$31,218,460) was derived from local taxes, applicable at that time to public (board) schools only; £876,360 (\$4,381,800) was derived from subscriptions (parochial schools chiefly), and £9,339,404 (\$46,697,020) from Government grants.

The Government grants for elementary schools have been modified and augmented from time to time since 1870 in ways that make it difficult to convey a clear idea of the actual increase in this source of income. From Table IX (p. 810) it appears that what is called the annual grant, because the amount is annually determined, has increased tenfold. From 1870 to 1896 the greater part of this grant was distributed to the schools at a certain rate per capita of the pupils passing the Government examinations, but since that date at a certain rate per capita of average attendance. Estimated on the basis of average attendance the per capita rate has more than doubled. In 1870 it was equivalent to 9s. 7d., in 1876 to 13s. 2.8d., in 1890 to 17s. 10.6d., in 1900 to 21s., and in 1902 to 22s. The total Government grant for public elementary education amounted in 1902-3 to £9,339,404 (\$46,697,020). This includes several grants besides the so-called annual grant, of which the principal are the fee grant (for schools remitting fees, law of 1891) and the special grant in aid of "voluntary schools" (law of 1897). These two laws indicated the growing interest of the Government in measures for the promotion of a system of free schools sup-

ported by public funds, which was one of the motives urged for the passage of the law of 1902.

The latest code or body of regulations for elementary public schools, passing into effect July 31, 1905, is cited as to its main provisions in Chapter XII. It marks a distinct advance over all previous regulations in respect to the treatment of the course of study, a matter in which the present secretary of the board of education, Mr. R. L. Morant, has shown deep personal interest. Formerly the subjects of instruction were comprised in two groups, one including obligatory subjects, the other subjects which might be taught under appropriate circumstances. The endeavor is now made to combine these subjects in one coherent whole, with directions as to maximum and minimum requirements. The introduction to the code sets forth a high but eminently practical ideal of the purpose which should control the work of elementary schools.

In addition to the provisions respecting the course of study the code prescribes the minimum requirements with respect to the number of teachers, and the conditions of the school buildings, premises, and equipment, that must be met for a school to share in the Government grant.

Table VI (p. 808), examined in connection with Article XII of the code (p. 814), shows that at present the schools as a whole have not reached the standard in respect to the proportion of pupils to each certificated or adult teacher required by the Government. The rate of grant and the basis of allotment are shown in articles 25-34 (pp. 816, 817).

Chapter VI of the code (pp. 817, 818) relates to "higher elementary" schools, which are now carefully distinguished from the ordinary elementary schools. The higher elementary schools have gradually developed through an extension of the elementary school curriculum, and in the large cities have come into competition with the secondary schools (endowed, proprietary, and private schools). The purpose of the present regulations is to provide, for pupils who can continue their studies up to 15 years of age, a four years' course of study, in which science shall predominate, and which shall be so correlated with the course of the elementary schools that pupils who have passed the fourth grade in the latter may be transferred to the higher grade school.

By reference to the brief conspectus of the system of public education in Scotland (pp. 820, 821) it will be seen that in this division of the Kingdom secondary schools were recognized by the law of 1872 and have been kept in pretty close relation with the elementary schools, thus avoiding the overlapping of schools and the friction between them which has disturbed England.

Chapter XII also includes a brief survey of the system of national education in Ireland, with an epitome of the results of recent investigations ordered by the Government with a view to devising plans for the better coordination and liberal support of the different classes of schools fostered and supervised by the Government (see pp. 825-827).

The physical condition of the poorer classes in England and Scotland has become a subject of great public interest in the last few years. Chapter XII presents a brief account of three special investigations ordered by the Government with a view to ascertaining the causes of physical deterioration and suggesting means of remedying this evil. The Royal Commission on Physical Training in Scotland, appointed in 1902, produced startling evidence of the low physical condition of school children in the classes, where food is scanty and the living conditions bad. The report of the commission led to the appointment of a special committee by the education department of Scotland to investigate the systems of physical training in use in schools and to draw up a model course of physical exercises suitable for children of school age. These efforts in Scotland were among the causes that led to the appointment in September, 1903, of a Government committee to inquire into the cause of "the alleged deterioration of certain classes of the population in England." The results of the three investigations referred to, as far as they relate to school life, are summarized in Chapter XII. Extensive citations are made from the report of the English committee relative to the existing agencies for supplying food to underfed children (see pp. 828-832).

Education in Canada, Australia, and New Zealand.—Chapter I (pp. 1-23) presents a brief survey of education in the British provinces of Canada, Australia, and New Zealand. Full expositions of the systems of public instruction in these divisions of the British Empire have been given in previous Reports (see references, p. 11). In the present Report emphasis is placed upon the particulars in which these systems differ from those of our own States.

In Canada the traditional regard for parochial schools is manifested by the special recognition accorded them in the chief Provinces, Quebec and Ontario. In Quebec the schools are distinctively sectarian—that is, either Protestant or Roman Catholic—and are organized in two systems separately administered, although under the general direction of a single chief, the superintendent of public instruction.

In Ontario the claims of the religious minority are recognized by a provision of separate schools where desired. The privilege is, however, seldom claimed excepting by adherents of the Roman Catholic Church and not invariably by them; although this denomination comprises about 18 per cent of the population, the enrollment in the Roman Catholic separate schools is 9 per cent of the total school enrollment (in 1902 45,960 pupils in a total of 454,088). The

right to establish separate schools was also granted in 1875 by the Dominion Parliament to the Northwest Territories. Since the chapter here considered was in press the establishment of two new Provinces out of portions of the Northwest Territories has been under consideration by the government. Great agitation has been excited throughout Canada by the proposition to provide by constitutional enactment that separate schools for Roman Catholics shall be maintained in the two Provinces. The proposition has been vigorously opposed on the ground that all legislation on school matters by the act of 1867, under which the union was constituted, is left to the provincial legislatures. The reopening of this question revived the bitterness of feeling that was manifested over the similar proposal in 1875, when this section was organized as a Territory, but recent elections seem to indicate that the measure finally proposed by the premier, Sir Wilfred Laurier, is regarded with much favor. In the present form the proposition is that in separate schools, whether Catholic or Protestant, the clergy shall have no voice or part in matters pertaining to secular education from 9 o'clock in the morning until 3.30 in the afternoon, but may then be admitted for half an hour to give such religious instruction as shall be approved by the local elected trustees.

The free school policy has been adopted in all the Provinces excepting Quebec, where it is very generally advocated. In Ontario fees are charged in the high schools, but may be and often are remitted.

The support of the schools in all the Provinces, not excepting Quebec, where the income from fees is small, is derived from provincial grants, local (city and township) appropriations, and local school taxes. The mode of appropriating the legislative grant differs in the different Provinces, but in all there is apparent the purpose to make this grant a means of stimulating local effort in behalf of the schools (see pp. 2-3).

In view of the attention awakened throughout the United States in the matter of teachers' salaries, the detailed statements respecting salaries paid in the several Provinces of Canada, which make up the larger part of the chapter, are of special interest (pp. 5-7).

The statistics of illiteracy for the entire Dominion (pp. 10, 11) show that whereas in 1891 in every group of 100 persons there were 17.5 illiterates over 5 years of age, in 1901 there were only 12.6 illiterates, or a decrease of 4.8 illiterates, over 5 years in every group of 100. The smallest proportion of illiterates over 5 years of age is in Ontario, viz, 7.8 in every group of 100 persons. This is a decrease since 1891 of 2.3 per each group.

Australia and New Zealand.—Under the act of 1900 constituting the Commonwealth of Australia the educational systems of the six

colonies thus united (now denominated original States), like those of the several Canadian Provinces, are independently administered. In each of the Australian States the control of public education is committed to a minister who is charged not only with the general administration of the system, but also with its local direction. He decides as to the establishment of school districts and schools and controls the school funds and properties. In each State the schools are supported by appropriations from the public treasury.

Before the union the several colonies were characterized by special efforts for adjusting the school provisions to the conditions of isolated rural districts. Recently the plan of conveying children at public expense to a central school has been adopted with great success, especially in Victoria (p. 14).

The question of religious instruction in public schools, which has excited much attention, has been variously settled in the different States; in Victoria and Queensland the schools are strictly secular; in South Australia unsectarian religious instruction is allowed; in New South Wales and West Australia religious instruction is allowed at an hour when children may be withdrawn whose parents so desire.

Secondary education is fostered in the several States either by appropriations from the public treasury for that purpose or by State scholarships open to competition. Technical and higher education are also aided by legislative grants.

The chapter presents copious extracts from official reports with respect to the current operations of the several systems.

Detailed particulars with respect to the progress of education in New Zealand during the year 1902-3, furnished to this office by Mr. Mark Cohen, editor of the Dunedin Evening Star, are also given in the chapter here considered. Among the points emphasized by Mr. Cohen are the high rate of average attendance maintained, viz, 84.9 per cent of the enrollment; the effect of recent legislation in reducing the average number of children under the charge of one teacher, and the advance made in the provision for manual and technical education.

A brief survey is given of the efforts made during the last twenty-five years to devise a scheme for the superannuation of aged and infirm teachers. A bill embodying the proposals for a measure of this kind was introduced into the legislature in 1902, but no action has been taken with reference to it. Mr. Cohen expresses the opinion that "the teachers of the colony will be dealt with sooner or later in this regard as a branch of the civil service, which they ought to have been all along."

Higher education in England.—Chapter XIII (pp. 833-861) relates to higher education in England as affected by the law of 1902. The term "higher" in this connection corresponds in part to the term

"secondary" as used in this country; but under the heading "higher education" the English law includes, besides secondary schools distinctively so recognized, science and art schools fostered by the Government and evening schools, all of which are to be carefully distinguished from the "higher elementary" schools referred to in the previous chapter. One purpose of the recent legislation in England has been to bring these various institutions into an organized system in each administrative area with a view to increasing their efficiency and determining how public funds may be best used for extending this provision. The policy of the Government in this respect, however, is to stimulate local activity without impairing that free initiative in communities and institutions which is a cherished principle in England.

The extent of the authority with respect to higher education which the law of 1902 has committed to the county and municipal councils, the supervisory control in respect to this matter to be exercised by the board of education, and the measures already adopted by the central and local authorities in view of these duties are explained in the chapter considered.

The regulations for secondary schools issued by the board of education limit the classification to schools, day or boarding, which carry the education of each of their students up to and beyond the age of 16 years, and thus distinguish secondary schools from the higher elementary schools, which retain pupils to the fifteenth year only. In the category of secondary schools the regulations include three types of schools as recognized by the Schools Inquiry Commission of 1864 and the Secondary Education Commission of 1894, namely, "first-grade schools, leading up directly to the universities;" second-grade schools, which stop short of that point as regards the majority of their scholars, "and third-grade schools, which do not attempt to carry education much beyond the age of 16" (p. 836).

A summary of the official report of the board, setting forth the classification and the number of "higher" institutions already brought under its supervision, is presented (p. 838).

The local authorities have thus far devoted themselves chiefly to the task of ascertaining the conditions to be dealt with in their respective areas as the first step toward organizing and extending the agencies for higher education. In this preliminary work the educational committees of Sheffield and Liverpool secured the services of Mr. Michael E. Sadler. The results of the exhaustive investigation into the provision for secondary and higher education made by Mr. Sadler in the cities named are embodied in two reports, which are reviewed in Chapter XIII. These reports are not only of great interest for the view they afford of the educational provision in two typical cities of England—one chiefly noted as a manufacturing center, the

other a commercial port of great magnitude—but for the light they throw upon tendencies and conditions affecting secondary and technical education throughout England. It will be noticed that Mr. Sadler advocates for Sheffield two distinct types of secondary schools, one which he calls “the highest type,” which corresponds to the first-grade school recognized in the official regulations (p. 842). In addition to a school of this type Mr. Sadler notes in his report on Sheffield the need of a secondary school “to feed the technical school with a steady stream of well-educated lads of 16 years of age,” and of a secondary school for girls, “which will feed the pupil teachers’ center with a steady stream of well-educated girls of 16 years of age.” These two wants he believed might be met by a single secondary school of of purely modern type, situated in a central part of the city. The plans for these two classes of secondary schools are full of suggestions of general interest (pp. 842–845).

The special needs of Liverpool led to a discussion by Mr. Sadler of the best means of promoting commercial education in that city, but in respect to this subject also his opinions are of much more than local significance (pp. 852–855).

In respect to each type of school described, Mr. Sadler emphasizes the need of quality rather than quantity. He recommends high requirements for the teaching staff. “Intellectual efficiency, combined with personal character,” he says, “is of vital importance in a system of secondary schools,” and he urges liberal treatment of approved teachers both in respect to salary and vacation terms. “A school,” he says, “gains greatly by anything which keeps its teaching staff fresh in mind and interested in improvements in methods of teaching and of school organization. A ‘grace term,’ after five years of service in the school, and a somewhat longer leave of absence after ten years of such service, would enable a teacher to widen the range of his professional experience, or to carry out some piece of original research with great benefit alike to himself and to the school.”

It is interesting to note that Mr. Sadler advocates manual training as a feature even of the higher type or classical secondary school (p. 843), and in the case of the city of Liverpool he advises that a manual training school should be established differing in type from either of the secondary schools already indicated. The suggestion is further made “that if the education committee venture upon the experiment of establishing the school they should seek some thoroughly qualified practical man with a strong interest in and experience of teaching, and after nominating him as head master to send him to the United States to make a careful study of what is now being done there in the manual training schools.”

Chapter XIII presents also a survey of the existing provision for secondary education in London as shown by a special investigation made in 1892 under the direction of the "National Association for the Promotion of Technical and Secondary Education," and in a work on London education by Mr. Sidney Webb, chairman of the technical education board of London (published in 1903). In this work Mr. Webb endeavors to correct the wide spread opinion that London is particularly lacking in provision for secondary education. "Including," he says, "only foundations of which the management is essentially public in character, London has to-day certainly not less than 25,000 boys and girls between 7 and 19 in its secondary schools, actually a larger number than either Paris or Berlin." This estimate takes no account of the strictly private institutions of secondary grade, which in 1892 were said to number at least 450.

In all the secondary schools of London, as is the case also in Sheffield and Liverpool, fees are charged, and the only chance for a poor boy to enjoy their advantages is by securing a scholarship. London has already liberal provision of funds of this class to be secured by competitive examination. Mr. Webb advises an extension and revision of the scholarship system with a view to reaching a larger proportion of the population (p. 858). It is noticeable, however, that in the opinion of this authority the masses are not reached by any of the secondary schools even with the liberal provision of scholarships. The exigencies of life are such that for them the system of evening schools, which gained remarkable development under the London school board, offers the only means of extending their education beyond the elementary stage (p. 859).

The three publications reviewed in Chapter XIII not only afford important information respecting the educational status of the cities to which they respectively relate, but they show very clearly the wide distinction between the conceptions of secondary education that prevail in England and in the United States. As stated in the chapter considered, the purpose in the United States "is to induce the largest possible number of young people to continue their studies beyond the elementary stage. This is held to be a measure of public safety, a means of raising the level of general intelligence, and of increasing the mental alertness of individuals. These results are also seen to promote industrial aptitudes and power, hence the almost phenomenal increase in the number of our free high schools in recent years. English policy, on the contrary, is directed to the selection of young people of special promise and to their preparation for definite spheres of usefulness."

Education in England in the time of Queen Elizabeth.—Chapter VIII (pp. 633-701) contains notices by Prof. Foster Watson, of University College, Wales, of certain early English writers on education,

with extracts from their writings, embracing works published during the last twenty-five years of the reign of Queen Elizabeth (1578-1603).

These extracts, although presenting no connected and comprehensive view, afford many significant glimpses into the educational methods of England at the period just preceding the English colonization of America, and throw light upon the attitude of the early colonists in Massachusetts, New York, and Virginia regarding education. It is made apparent to what degree they were the product of the environment in which they had grown up in the old country, and that in framing their educational system they either adhered closely to English models or carried into practice ideas which they had brought with them from England.

Religion is frequently and strongly emphasized in these extracts as the essential basis of education. Much stress is laid upon grammar and languages, especially Latin, which appears to have been the most prominent subject of study and instrument of culture. Logic, rhetoric, and other branches of the old scholastic curriculum are held in estimation. Mathematics finds little place in the schemes of study recommended. Mulcaster, who is extensively quoted, makes slight mention of mathematical studies; William Kemp says (1590): "The scholar can easily pass through these arts [arithmetic and geometry] in half a year" (p. 684).

But references to "modern" studies are by no means lacking in these writings, and many recent educational reforms and innovations are distinctly foreshadowed. Arguments setting forth the importance of the study of English are quite frequently met with; the claims of the physical sciences and even agriculture as subjects of study are occasionally presented; systematic physical training, the education of girls, and teachers' conferences have their advocates. It is particularly noticeable that the need of professional training for teachers was recognized at this early period. "This trade," says Mulcaster in 1561 (p. 654), "requireth a particular college."

The low estimation in which the teachers' calling was generally held, as well as the scanty remuneration of those who pursued it, is made a subject of complaint in these writings. It is probably explained by the low average character and slender intellectual acquirements of the teachers themselves. Shakespeare has made us familiar with a certain type of Elizabethan pedagogues in Holofernes. The need of selecting capable teachers of good repute is frequently impressed upon those having the charge of children. The counterpart of much that is said concerning teachers may be found in modern school reports.

Education in Sweden.—Chapter XI (pp. 767-797) is taken up with a general view of the educational system of Sweden, which has been abridged from a more complete account published by the Govern-

ment of Sweden in connection with its exhibit at the St. Louis Exposition, and furnished to this Office through the courtesy of Dr. N. G. W. Lagerstedt, royal commissioner for Sweden to the exposition. The school system is a thoroughly modern one, which has been developed on lines adapted to local conditions, and which presents characteristic features and exhibits tendencies that merit the attention of those engaged in the work of school administration.

Sweden has both aristocratic and democratic tendencies, the latter now predominating. The campaign waged in that country against the abuse of intoxicating liquors, which has attracted general attention elsewhere, is to be noted as throwing light on the higher aspirations of the Swedish people.

The system of schools, both higher and lower, though based on legislation enacted by the Riksdag, is also subject to executive regulation. No measure of any importance, however, is now inaugurated without the consent of the Riksdag. The schools come under the ecclesiastical department; indeed, the connection between education and the church is very close. The diocesan board (bishops and chapter) superintend all the public schools of each diocese, and to a certain extent the private schools, especially State-aided ones.

The mass of the people receive their education in the common schools. Both the establishment of these schools (at least one in every parish, or district) and attendance upon them are obligatory. The local control is exercised by a board elected by the church assembly (the rector of the parish being president), with a certain degree of supervision by the civil authorities. Teachers are permanent and nonpermanent; the permanent teacher is elected by the church assembly from a list of three candidates nominated by the school board, and must be a graduate of a public normal school (of which there are 13); nonpermanent teachers are employed by the board either for a definite or an indefinite term. In the upper department of the common schools about two-thirds of the teachers are men; in the "infant" department (the two lowest grades) they are almost exclusively women. Teachers are pensioned from public funds (a permanent teacher \$200), while the teachers themselves contribute to a fund for widows and orphans.

Attendance begins at 7 years of age. The course is 2 years in the infant department and 4 in the common school proper. The course of instruction is arranged by the school board under the guidance of a "normal plan" issued by the ecclesiastical department, embracing the subjects prescribed by law. These include the usual elementary common school branches; also religion, geography, history, geometry, natural science, drawing, singing, gymnastics, and gardening. Sloyd is optional. The Swedish sloyd system is particularly described on pages 774-775. Some of the larger towns have school kitchens for

instruction in cooking, and baths. The food prepared in the kitchens is used to furnish free lunches for the poorer pupils.

For those who have passed through the common schools provision is made for more advanced instruction in the common school branches by continuation schools, higher common schools, etc. The so-called Swedish "people's high schools," course 1 or 2 years, of which there are a few in the country districts (774 pupils in 1900, average age of admission about 20), are of this character, and not high schools as understood in this country. In some of them the second year's course is arranged on the lines of a thorough school of agriculture.

Boys for whom an education is desired beyond that imparted by the common schools, or a preparation for the universities or higher special schools, must have recourse to the secondary schools, of which there are 82 public, with a course following upon a three-years' course in the common schools. The information given in the text of Chapter XI regarding these schools has been in part superseded through a reform measure which passed the Riksdag in 1904, the chief features of which have been communicated to this Office by Doctor Lagerstedt and are given in a footnote to page 784. It appears from this that a completely organized secondary school for boys is hereafter to have a "modern" course of 6 years preparing for practical pursuits, and a course of 9 years preparing for the universities; the two courses have the first 5 years in common; the last 4 years of the university preparatory course (i. e., after the divergence of the two) is known as the "gymnasium," and of these there are two kinds—Latin and modern gymnasiums.

The most important feature of the new law, perhaps, is the curtailment of the time given to the ancient classical languages. Hereafter Latin will be studied only during the last 4 years of the course and Greek during the last 2 years—a reduction of 2 years in each case. The time given to Latin had previously been reduced, about 30 years ago, from 8 years to 6. The classical languages are thus being steadily forced into the background. This is also manifested by the smaller number of pupils who study them. In 1875, 85 per cent of all the pupils in the last 4 years studied Latin, in 1901–3 only 47 per cent.

Other important features of the new reform are (1) the institution of a secondary school board, to which are to be transferred affairs hitherto managed by the ministry of education or the chapters of the dioceses, and (2) the authorization of coeducation in public secondary schools, the first instance of the kind in Sweden.

Private secondary boys' schools, or mixed schools, preparing for the universities are only 5 in number, in consequence of the smallness of the fees exacted at the public schools (\$8, the yearly maximum).

Two of these schools are coeducational. Private secondary schools for girls are numerous, there being 120 of these, having altogether 13,000 pupils, and all with two exceptions having come into existence since the middle of the last century; 5 prepare for the university entrance examination, taken now yearly by 50 or more girls.

Sweden has two State universities, coming under the ecclesiastical department, and established at Upsala (in 1477) and Lund (in 1668), respectively, both of these places being country towns, as is the case with the two chief university seats in England. Details regarding the government, organization, students, etc., of these universities are given on pages 790-793. It may be noted here that each has four faculties, namely, theology, law, medicine, and philosophy, the latter being divided into the section of humanistics and that of mathematics and natural sciences. The rector is elected by the consistory of professors for 2 years from among the professors in ordinary; the latter are appointed by the Government from among the candidates who present themselves on public notice of vacancy being given, after due consideration of their respective merits and recommendation by the faculty concerned, consistory, and chancellor; or, in case of an eminent scientific man, the appointment may be offered directly without competition. The courses of study are unusually long, 6 to 8 years being required for the degree of licentiate of philosophy, 7 for candidate's degree in law, 9 for same in theology, and 11 for licentiate's degree in medicine; this abnormal length of time results in part from the nonpractical arrangements in regard to teaching, for which a remedy is now being sought by a royal committee.

Besides the two Swedish state universities there are two classed as private, though subject to a measure of Government control; these are the universities of Stockholm (1878) and Gottenborg (1891).

Sweden occupies advanced ground with regard to the education of defective and neglected children. The instruction of the deaf and blind is made obligatory upon the local authorities, as is the case in a few of the States in our own country. The Swedish schools for the deaf are establishments upon a large scale, counting as a rule 100 pupils or more, with newly erected and costly buildings. An institution at Venersborg for blind deaf-mutes is said to be the only one of its kind in the world. It has now 14 pupils, of whom only 6, however, are blind deaf-mutes. Liberal provision is made for feeble-minded children, there being 36 institutions for this class, though not all are schools; a normal school for teachers of feeble-minded children is conducted at Stockholm.

The work and influence of Hampton (Chapter VI, pp. 559-579).—At a meeting held at New York in February, 1904, under the direction of the Armstrong Association, addresses were made by a number of

prominent men in which the educational needs of the South, especially as related to the elevation of the colored race, were considered from various standpoints.

A letter from ex-President Cleveland was read, in which he referred to the general agreement as to the necessity of a better equipment of the negro population for self-support and usefulness and the obligation upon patriotic citizens to encourage institutions having this object in view, and which had proved their merit by their results. Mr. Andrew Carnegie, the chairman of the meeting, in his address dwelt upon the menace to the state of an ignorant voting population. It is only through education in its widest sense, he said, that the backward elements of society can become properly qualified to have a voice in the government, and an educational test for the suffrage should be adopted and strictly applied to black and white alike.

President Eliot of Harvard spoke of the necessity of the "prompt formation of a sound public opinion about the right treatment of backward races," and asserted that Hampton possessed the keyword to the situation, viz, education and productive labor. He discussed at some length the chief points of resemblance and of difference between northern and southern opinion regarding the negro. The two sections, in his view, are agreed in regard to keeping the two races pure, as well as in having separate schools wherever the colored children are sufficiently numerous to justify it, while the northern whites are even more averse than the southern whites to coming into personal contact with the negro. On the other hand, in the North the idea of political equality does not carry with it that of social equality, as seems to be apprehended in the South. Moreover, while public opinion at the North is in favor of giving the negro good opportunities for education of every grade, in the South diverse views are held on the subject. Some southern whites think that any kind or degree of education whatever works an injury to the negro; others think he should be educated, but only for manual occupations, while still others recognize the need of negro professional men with an adequate equipment. The same dread of an ignorant and corruptible suffrage exists in the North and in the South, but in the North a remedy is sought through the medium of universal education. In regard to the value of the peculiar type of education which characterizes Hampton, i. e., education through manual training and labor at trades and crafts, there is coming to be a striking agreement between northern and southern opinion, as is witnessed by the rapid introduction of such features during recent years into urban school systems in the North.

President Eliot asserts that there is a growing appreciation in the North of the peculiar difficulties attending the solution of the educa-

tional problem in the South, and an increasing disposition to approve of some constitutionally devised means of national aid, since the National Government contributed in a degree by its action to the existing state of affairs. The northern whites "would like to see a way found for the National Government to spend as much money on solving the southern negro problem as it has been spending for six years past on the Philippine problem."

Doctor Frissell, the principal of Hampton, spoke of Hampton's methods and results. The idea of labor is the underlying motive. All education there is to fit the student to work. The young are taught how to live and labor. The academic work is subsidiary. This kind of training, in Doctor Frissell's view, has three results: It forms character, it produces economic independence, and it develops an adequate degree of intelligence; he refers to the records of living graduates for confirmation of his views, and cites particular instances to show the influence they have had throughout the South in stimulating and uplifting the negro race. "Every negro school in the South is crowded to-day." The missionary activities of one graduate have so transformed conditions in tidewater Virginia that in 33 counties more than 70 per cent of the negro farmers own and manage their land. Near Portsmouth, Va., is a model negro settlement, built up through the efforts of a former Hampton student, which numbers 300 colored residents, and where "there has never been an arrest, nor has there been a saloon in the town."

The address of Dr. Booker T. Washington (pp. 573-579) was devoted mainly to throwing light on the question whether the colored race is responding to the efforts that have been made to place it upon a higher plane of civilization. He stated that the negroes have come to have aspirations; that their minds have been awakened and strengthened; they want land and houses, churches, books, and papers. The percentage of colored illiteracy is being rapidly reduced each succeeding decade, as shown by the Federal census. Contrary to the idea generally entertained, the colored people contribute largely to their own education. The State superintendent of Florida says, and adduces figures to show, that "the education of the negroes of middle Florida does not cost the white people of that section one cent." In Mississippi, also, they are said by an eminent authority to be paying in a large measure for their own education. The present opportunities for education, however, are very inadequate, owing to lack of funds; but whatever has been expended has been well repaid, not a single graduate of Hampton or Tuskegee, for instance, can be found in any jail or State penitentiary. Statistics are quoted and other evidence to disprove the unwarranted assertion that the negro grows in crime as education increases. Joel Chandler Harris is authority

for the statement that "the overwhelming majority of the negroes in all parts of the South, especially in the agricultural regions, are leading sober and industrious lives."

Sometime since Doctor Washington sent out letters to representative southern men asking them for their opinion, as the result of their own observation, on various points relating to the progress and position of the negro. One hundred and thirty-six replies were received, a summary of which is given on pages 576-577. The near approach to unanimity exhibited by these replies in regard to most of the matters that were made the subject of inquiry would seem to indicate a general belief among the Southern people that education had improved the morals of the negro and made him more valuable as a citizen, as a workman, and as a business man. Moreover, there is in these replies but little trace to be seen of the existence of any wide-extended prejudice against his acquiring property or against employing him as a skilled workman. The conviction is forced upon one examining the grouping of the answers to the several questions that active opposition in the South to the negro's advancement must be of insignificant proportions if these answers reflect in any adequate degree the attitude of the public mind in the matter.

Temperance instruction in public schools.—Chapter VII (pp. 581-632) contains a number of documents illustrative of the present position of instruction in the effects of alcoholic drinks and narcotics. On pages 581-588 the revised law (1901) of Connecticut is given, together with a statement of a committee appointed by the Connecticut Council of Education. The enactment of this law was secured by the joint action of the school people and the temperance people of Connecticut, probably, the committee says, the first instance of such cooperation in any State in support of a temperance educational bill. The new statute differs from the old one in not prescribing temperance instruction below the fourth grade nor in the high school; in not requiring the use of text-books below the sixth grade, and in not requiring any text-books to devote a definite space to this instruction.

Following this is a report by the New York State Central Committee on Scientific Instruction as to the results of the study of physiology and hygiene, being a reply to the State Science Teachers' Association. The central committee sought for their information as to the effects of this study upon the children of the State through the medium of inquiries addressed to their parents and to patrons of the schools. Numerous extracts from the replies received by the committee are given, which go to show that "there is a growth of widespread intelligent practice of general hygiene resulting from this study," and that it is "strengthening the children to resist temptation to use" alcoholic drinks and tobacco, and is "helping them and their parents to abandon such use when already begun."

Some months since a French economist, F. Dupré La Tour, paid a visit to the United States for the purpose of making a study of the various methods employed here for combatting the evils resulting from the abuse of alcoholic drinks. The results of his investigations were embodied in a paper published in the *Musée Social*, a translation of which is given on pages 602-625 of this report. While his observations were intended primarily for the instruction of his own countrymen, they are not without their value to us in enabling us to see what in our aims or methods particularly impressed an intelligent French observer, or induced comparison with conditions existing in France. Coming from a country where the activities of such temperance societies as exist are limited to the promotion of temperance in its literal sense, and where, indeed, the president of one of the principal ones is himself a wine merchant, he could not but be impressed with the radical character of the views held and methods advocated by temperance reformers in the United States. The total abstinence from alcoholic beverages on the part of the individual and the complete suppression of the liquor traffic are root-and-branch measures which have almost no counterpart in France. The difference in the attitude of the people of the two countries Mr. La Tour attributes to the greater abuse of alcoholic drinks in the United States, which calls for extreme remedial measures, and which is due to racial, climatic, dietary, and other conditions, and to social customs, all of which result in making the United States what he calls a country favorable to alcoholism.

The different agencies and influences for saving people from falling into the drink habit and rescuing those who have become victims to it are considered in turn by Mr. La Tour, including the work of the religious denominations, the temperance societies (notably the Women's Christian Temperance Union), temperance instruction in the schools, the demand for abstinence from alcoholic drinks made upon employees by railroad corporations and other employers, the action of trades unions, the stand taken by life-insurance companies and the force of public opinion. The law for the instruction of public-school pupils in temperance is considered a "most excellent" instrumentality, but the question is raised whether it is not presuming too much on the patience of the pupils to compel them to listen eight years in succession to the same teaching, as the text-books of the series "vary very little;" also they give to the pupils "ideas of physiology which are a little exaggerated."

In taking up the different measures for suppressing or restricting the liquor traffic, Mr. La Tour discusses prohibition, the license system, local option, and the State dispensary system. The question of the saloon in politics also engages his attention. He displays throughout a keen insight into and a ready grasp of the conditions

prevailing in this country, which, together with his friendly criticisms from the point of view of an outside observer, render his paper a valuable contribution to the literature of the subject.

Following Mr. La Tour's report is given (pp. 625-630) the translation of another suggestive document proceeding from a foreign source, and tending to show that the movement against the abuse of alcoholic drinks is taking definite shape in other countries. The document referred to is an order issued by the Prussian minister of education, which outlines the character of the instruction to be given in the Prussian elementary and secondary schools regarding "the injurious effects of immoderate indulgence in spirituous beverages" (*die Nachteile des übermässigen Genusses geistiger Getränke*). So far as appears from the text of the order no attempt is made to prescribe the methods of the instruction, or the frequency or length of the lessons, or the grades in which they are to be given, but the order is confined to a simple statement of such points regarding the nature of alcohol and the evils resulting from its use as are to be impressed upon the attention of the pupils. The injurious effects of overindulgence upon the physical and the moral well-being of the individual, upon the family, and upon the community are successively considered, the statements being reinforced by a few homely illustrations and simple but significant statistics.

Chapter VII closes with a report on temperance instruction in western Massachusetts (pp. 630-632), by G. T. Fletcher, reprinted from the Massachusetts School Report. While not approving in all cases of the text-books in use and methods employed, Mr. Fletcher finds that "much good to the children and to the community has been achieved."

Juvenile criminality in Germany.—Chapter IX (pp. 703-713) contains an account of juvenile criminality in Germany. The statistics on which this discussion is based were collected and published by the Imperial Statistical Bureau, and show that the number of young persons convicted increased annually up to the year 1901; moreover, it increased in greater proportion than the number of convicted adults. The author accounts for this partly through the increasing disposition to place responsibility on children whose ethical judgment is not sufficiently developed. The general opinion of those well qualified to pronounce on the subject is that the criminal code has set the age limit for punishment by law too low, fourteen years. This code assumes that responsibility is incurred at that age, in view of the degree of intellectual development commonly then reached; but the author pleads for education, not punishment by law, because though children may have learned to distinguish between right and wrong, between mine and thine, etc., the moral sense and the will power are

often still lacking to uphold intellectual discrimination, to withstand temptation and subdue desires. It is one thing to know what is wrong, and quite another to resolve to abstain from doing wrong. The author is urgent in favor of establishing courts for children, and the confinement of juvenile apart from adult criminals. He strongly denounces the custom of sentencing children to brief terms in jail, where they come in contact with vicious adult criminals, and pass, so to speak, through a school of crime. He also recommends the postponement of the age of criminal responsibility from 14 or 16 to 18 years of age.

Grammar of the Hlingit language.—In circular No. 2 of this Bureau for 1890, some Eskimo-English and English-Eskimo vocabularies were published which were prepared by Ensign Roger Wells, jr., U. S. Navy, and Interpreter John W. Kelly. These vocabularies were republished as Chapter XXVI of the Report for 1896-97. They were expected to be of use to teachers going to Alaska. It is now possible to continue the work then begun by publishing a grammar and vocabulary of the Hlingit language of southeastern Alaska, which constitutes Chapter X of this present Report. This work is the joint production of Mr. William A. Kelly, the principal of the training school at Sitka, Alaska, and Miss Frances A. Willard, a teacher at that school, and it is believed that it will be of great assistance both to the teachers in that part of Alaska and to the native scholars as well, besides being a contribution of value to students of languages generally.

Mr. Kelly has been among the Alaskan Indians for twenty years, having been at first in charge of the educational work of the Presbyterian Board of Missions in Alaska, and being afterwards appointed district superintendent under the United States Bureau of Education. Miss Willard was born a member of the Hlingit tribe, was rescued while yet an infant from an unpromising future among her own people through the benevolence of the wife of a missionary, was christened with the name she always afterwards bore, and was carefully educated for many years at a well-known private school for girls at Elizabeth, N. J., where she was given, and faithfully improved, all the best advantages, acquired all the refinements of a well-educated young woman, and became remarkable for really unusual literary attainments. Her death in 1904 was not only a calamity to her own people, to whose civilization she had devoted herself, but it was also a loss to science.

The present work is therefore especially valuable, from the familiarity of the authors with the Hlingit language and their ability to present the subject in such a manner as their experience has shown to be most serviceable to learners. The student will be struck with the concise yet clear and practical exposition of the grammar of this

Alaskan tongue, which belongs to the Turanian or agglutinated languages and is thoroughly alien in its construction to that of the European family of languages.

University of Paris.—In Chapter V (pp. 519–558) Dr. John W. Hoyt gives a history of the University of Paris during the Middle Ages. The historical antecedents and causes of the movement which resulted in the gathering of teachers and students at Paris are pointed out, including both the civil and ecclesiastical conditions of the time. The organization of the students into “nations” and of the teachers into faculties is traced, together with an account of the scope of the mediæval studies, the scholastic method of teaching, and the influence of the university upon contemporary life and the history of France. The recent interest in Oxford University occasioned by the Rhodes bequest has made the organization and purpose of the great universities of the Middle Ages an object of special study in this country with a view to understand better the survivals found even in our later and latest foundations on the border lands.

Development of the public school system in the South.—In Chapter XVI (pp. 999–1090) Dr. A. D. Mayo gives an historical account of the final establishment of the American common school system in the States of North Carolina, South Carolina, and Georgia, covering the period from the close of the civil war to the beginning of the present century. In all of these States the friends of popular education had to contend not only with the widespread prejudice against educating the negroes at public expense, but also with the more or less active opposition of those who were antagonistic to any system of free public schools for either race. The story of the alternate successes and reverses of those who were waging the campaign in behalf of the schools until success finally rewarded their efforts is graphically told by Doctor Mayo, whose labors in the South in the cause of education, extending over the greater portion of the period included in his narrative, have given him an intimate acquaintance with the course of events in that section, and render him peculiarly qualified to speak upon the subject.

Schools of Alaska.—Chapter XXXVI (pp. 2257–2268) contains an account of the schools in Alaska, which, owing to the delay of the report, has been brought down to the 1st of July, 1905. The historical table, showing the length of school term and enrollment of pupils, begins on page 2263 and includes three pages, giving the months taught and the enrollment for the years beginning 1892–93 and extending to 1903–4. For the years 1903 and 1904 the total enrollment and average attendance are given by months. Owing to the fact that the natives have a winter residence different from the summer residence, the schools vary much from month to month in average attendance, and, as is shown by the comparatively large

number in total enrollment for the year, there must be in many cases sets of children who come to school in the fall and early spring and other sets who come in the summer time or in the winter. As is the case with the rural schools in the States, the number enrolled is the most important item of statistics, for it shows how many different individuals in the population are reached by school influence; nor is it possible to say that some of the older children who attend school in the severe weather of some of the winter months do not learn more in a few days than the young children during a much longer period of school attendance in the summer.

For advancement in higher studies such as are pursued in the grammar school grades of the elementary schools in the States or in our high schools, what is learned by a long session is out of all proportion to a short session. But in the case of the rudiments of reading, writing, arithmetic, and geography the ratio is reversed, and in one week's time the pupil learns more than half as much as he would learn in two weeks' time. Many of the natives are extremely bright, judged by the readiness of their memory for forms and sounds. They pick up words quite fast and learn the alphabetic symbols readily. They do not make so much progress in syntax or in the construction of the white man's sentence. They learn to count readily and to add small numbers, but they do not seize very well the operations of subtraction and multiplication. Multiplication is an abbreviated method of addition based upon a knowledge of units of different orders indicated by the position of the digit, namely, units, tens, hundreds, thousands, etc., each place to the left or right being ten times more or ten times less than its neighbor in value. A bare statement of the operation of multiplication shows that it rests upon the use of reflection as much as memory. From this it may be readily understood why the multiplication of written arithmetic is quite difficult for the natives of any tribal civilization. But if subtraction and multiplication are difficult, division has a higher order of difficulty. For it proceeds by analysis, taking to pieces large numbers which are indicated by digits of different orders—a process which requires one more stage of reflection than multiplication or subtraction of written numbers. It requires a reduction of the remainders left to the next lower order of digits and the addition of the same to the digits belonging to that place or order. It is of interest to notice, on page 2260, the report of Joseph Weinlick at the school at the Moravian mission near Bethel. After some years of little result in the attempt to teach his pupils arithmetic he was able to make some progress in teaching addition, subtraction, and multiplication to these children, "but division is yet a mystery to them."

On page 2261 in the report of Mrs. Otha Thomas, the teacher at Kotzebue, a hint is given as to the method or device by which a little education at school becomes fruitful to an entire family or to many families through the teaching of bright pupils who instruct younger and older members of the family at home. "One of these particularly bright lads, who lived at a point about 225 miles distant from Kotzebue, took a number of old books from the school and taught his smaller friends their letters."

The reindeer history is epitomized on the three pages, 2266-2268. Nine comparative tables are given, showing the distribution of the deer at the 15 stations and the increase or progress from 1893 to 1905.

Table 1 shows the increase of fawns surviving, those of 1893 being 79, and each successive year showing an increase until the fawns of 1905 numbered almost 3,000.

Table 2 shows the annual importations of deer from Siberia, there being 9 annual importations in the fourteen years from 1892 to 1905, making in the aggregate 1,280 imported deer. From these 1,280 the entire 10,241 deer, reported in the herds on July 1, 1905, were descended.

Table 3 shows the annual mortality of the herd for fourteen years, and includes the numbers that died by disease, by old age, by accident, or males that were slaughtered for food, either by the natives or the missions, or sold to miners or other white immigrants for food. The slaughter or transfer of female deer is strictly prohibited in all the herds in Alaska.

Table 4 shows the sex of the old deer living on July 1, 1905, and the sex of the fawns born in the spring of 1905. There are 7 instances out of the 30 where the sex is not given—3 in the case of adults and 4 in the case of fawns. The report as to sex of fawns is not so important, because the average is 103 males to 100 females. The sex of the adults at Nulato by later returns is known to have been 47 males and 147 females, and that at Bettles 75 males to 225 females. This makes the stations reporting 14 out of the 15, giving 2,584 adult males and 4,504 females, a ratio of $36\frac{1}{2}$ per cent of males to $63\frac{1}{2}$ per cent of females, the same being a ratio of 4 to 7, or 100 males to 175 females. The previous year, July 1, 1904, the ratio was 38 per cent adult males to 62 per cent adult females, showing a slight increase in the proportion of females in the herds in 1905. The ratio of fawns born in 1904 was 105 males to 100 females, a slightly larger proportion than for 1905, possibly due to a greater severity of the season of 1904. This table, No. 4, settles for all practical purposes the question of the truth of rumors of loose management of the herds in Alaska with regard to the sale or slaughter of female deer in Alaska. A proportion of 4 males to 7 females ought to be considered satisfactory.

Table 5, page 2267, shows the various loans of deer to missions for the training of apprentices and to the 5 Laplanders for their annual services as teachers. There are 10 stations at missions to which loans have been made. The loan to Wales of 1894 was counted as a gift since 1899, when the deer taken by the Government for the relief of the whalers at Barrow were returned to their respective stations. Three other mission stations have returned the deer borrowed—Golofnin Bay and Tanana, 50 each, and Teller station, 100. Four stations, Nulato, Bethel, Carmel, and Kotzebue, with an aggregate of 371 deer loaned, make returns in the year 1906. Besides these the Lapp herders Sara, Spein, Nilima, Bahr will return their loans of 100 each in the summer of 1906, making with the 371 returned from the missions an aggregate of 771 deer from loans returned in 1906 to the Government. In this table, No. 5, there should be entered another station, Cape Nome, where in 1894 a herd of 100 was loaned to a native Eskimo, Antisarlook. After his death, which occurred in 1900, his herd passed by inheritance to his wife, Mary Antisarlook, who has placed her deer in the charge of the Government, paying to the Government 25 deer per annum for their keeping, by an arrangement effected by the Bureau for the purpose of saving from destruction the remnant of a fine herd left by Antisarlook at his death.

In Table 6 the number of apprentices at each station, together with their several holdings in reindeer earned by their apprenticeships of five years each, are given. Seventy-eight apprentices owned 3,817 deer.

In Table 8 the relative holdings of the Government, the mission stations, the Lapp herders who form a teaching force, and the apprentices who are natives, are given. The Government holding is 3,073, the stations hold 2,127, the Lapp herders 1,189, and the apprentices 3,817. Reduced to percentages the Government owns, either under direct control or under loan to others, 30 per cent of all the deer; the mission stations own 21 per cent, the Lapp herders 11 per cent, the apprentices 38 per cent. The missions and Lapp herders form the teaching force, and the greater part of the mission herds goes to rewarding successful apprentices. The missions and Lapps own 32 per cent of the deer, while the apprentices own 38 per cent. Thus outside of the Government ownership more than half of the deer are in the hands of the apprentices already and their quota increases from year to year.

It is in place here to mention the policy of management that has prevailed to date with the reindeer as an educational apparatus in Alaska.

There are three classes of reindeer stations in Alaska—first, mission stations; secondly, relief stations, and, thirdly, stations in which the reindeer and the schools are entirely under the Government.

1. The first and by far the largest number are included in the class of mission stations that have received loans of small herds of deer for three years or five years, as shown in Table 5 (p. 2267), said stations entering into agreement to furnish apprentices for instruction in the care of herds, and to reward the successful apprentices by the gift of a certain number of reindeer at the close of the apprenticeship of five years, and further agreeing to return the number of deer in good condition equal to the number loaned, and a like proportion of male and female deer, and with other agreements as to the prevention of the slaughter of female deer, etc.

Below I give a brief history of each of the mission stations, showing the beginnings and the present status as to number of deer and as to distribution (*a*) to apprentices, (*b*) to station, and (*c*) to Government, and the cost to the Government for supplies as well as the cost to the Government for superintending the herds. Next I bring together in three tables the most important of these items.

The first table below, total number of deer at the mission stations in 1905, shows how all the stations are observing the regulation which forbids the slaughter of female deer and permits to some extent the slaughter of male deer. It shows that the male to female deer are in the proportion of 2,178 to 3,711, and that the total number of deer at the mission stations is 8,585 (including loans from Government and the herds of Lapp herders), out of the total of 10,241 for all the herds reported on July 1 of the present fiscal year, 1905-6.

The second table shows the cost to the Government of the reindeer herds at the mission stations, showing an expense of only \$358.38 for supplies (which was for services in removing herd), and for cash expenditure for superintending herd only \$1,060.60, giving a total of less than \$1,500 for the entire expense to the Government, paid from the appropriation of Congress for the support of the reindeer experiment, the same being an average of 16½ cents per year for each reindeer.

The third table shows the distribution of reindeer at the mission stations in 1905—first, the number in charge of the mission stations; secondly, the number of Lapland herders who have received the loan of reindeer as wages for five years of instruction in herding; thirdly, showing the number of apprentices (including also apprentices who have become herders on their own account) and the number of deer belonging to said apprentices, and, lastly, the number of reindeer in the mission herds directly under control of the Government or due to the Government upon the expiration of the loans now pending.

It will be seen that the number of deer belonging to the 65 apprentices is 3,236; the number belonging to the stations is somewhat less, namely, 2,698; the number belonging to the Lapland herders is 1,688, and the number owned by the Government at these mission

stations is 1,070 loaned and due some time in the future, and 928 under present direct control of the Government (held subject to its order), some of them kept in the mission herds-awaiting transfer to new stations, making a total belonging to the Government in these mission herds of 1,998. This third table answers the question whether the mission stations or the apprentices have accumulated the largest number of deer.

The history of the mission stations shows that the missions in providing support for apprentices assume the chief expense in the reindeer instruction. Estimating the expense per apprentice at \$500 per year, an expense which has to be assumed in some stations under the Government and which is liable to be incurred at any time if the superintendent of the herd is not a careful manager, preventing the sharing of rations on the part of the apprentice with his family, the 65 apprentices at the missions would cost an annual sum of \$32,500. Estimating the expense at missions at one-third of this sum, by reason of the thrift which directs the Eskimo families to derive most of their support from what is called native food (whale, walrus, seals, wild birds, and game), the minimum amount contributed to the support of reindeer instruction by the mission stations is something over \$10,000 per annum, or two-thirds as much as the Government appropriation of \$15,000.

2. The second class of reindeer stations are relief stations. Of these there are two, Gambell and Barrow. Gambell Station, on St. Lawrence Island, is kept there because of the importance of the island, due to its position near Bering Strait and to the danger of shipwreck to the whaling vessels bound for the Arctic seas. For the original loan of 70 reindeer at St. Lawrence Island the present herd showed in 1904 a total of 212 deer, of which the Government owned 154 and 4 apprentices owned 58. The cost to the Government for supplies is very large, and also for the superintendence of the herd.

Point Barrow is the northernmost land of the continent of America and a strategic point for the whaling fleets of the United States. I have explained below the circumstances of the 125 deer left at the station, 100 of which were for the Presbyterian Mission. As I have stated, the Presbyterian board declined to take the loan, urging financial reasons for their inability to support the Eskimo apprentices, but directing their missionaries to do all in their power to make the reindeer herd a success. The 100 reindeer of 1898 have increased to 629 deer, nearly all in the hands of the 10 apprentices.

CONDITION OF THE MISSION HERDS.

Wales (Congregational mission) received herd of 118 reindeer from Teller 1894; regarded as a gift after the relief expedition of 1898 to Barrow and never returned.

In 1904, July 1, it had 402 adult males, 717 adult females, 369 fawns, making a total of 1,488. Two colonies of reindeer were established from Wales during the summer of 1904; in August, 1904, at Shishmaref, 389 deer, and the last of December, 1904, 365 at Deering. Counting in the two colonies with the Wales herd, the aggregate is 1,389 adult deer and 560 fawns, making a total of 1,949 deer for Wales with its two colonies, of which Wales retains 669 adult deer and 273 fawns, making a total of 942. Shishmaref and Deering, the two colonies, are also presented separately below.

Number of deer belonging to the station in 1904, 360; in 1905, 216; number of deer owned by 9 apprentices in 1904, 389; in 1905, 537; number of deer owned by the Government in 1905, 189.

Cost to the Government for supplies: 1904, nothing; 1905, nothing; 1906, nothing.

Cost to the Government for superintending herds: 1904, nothing; 1905, nothing; 1906, nothing.

Shishmaref (colony of Congregational Mission).—In August, 1904, 389 reindeer driven from Wales to establish a new herd at Shishmaref.

In 1905, July 1, it had 321 adult deer and 139 fawns, making a total of 460. The Wales Mission owns 166 deer; 7 native apprentices transferred from Wales own 294 deer; Government owns none.

Cost to the Government for supplies: 1904, nothing; 1905, nothing; 1906, nothing.

Cost to the Government for superintending herds: 1904, nothing; 1905, nothing.

Deering (Society of Friends).—One hundred head of reindeer loaned to the station January 18, 1905, for five years. Two Eskimo herders, acting as teachers, colonized from Wales (see Wales above) with 265 deer; total at station, 365 deer.

In 1905, July 1, 106 adult males, 225 adult females, 148 fawns, making a total of 479 deer.

The station has 128 deer, of which 100 are borrowed and returnable on January 18, 1910; 3 Eskimo apprentices own 351 deer.

Number of apprentices, 3.

Cost to the Government for supplies: 1905, nothing.

Cost to the Government for transfer of deer and superintending herds: 1905, \$558.38.

Golofnin Bay (Swedish Lutheran Mission).—Fifty deer loaned to station January 16, 1896, and 50 deer returned to Government three years later, 1899.

In 1904, July 1, it had 257 adult males, 382 adult females, 285 fawns, making a total of 924. In 1905 it had 297 males, 511 females, 356 fawns, making a total of 1,164.

Number of deer belonging to the station in 1905, 462; number of deer belonging to 12 Eskimo apprentices, 383; number of deer held by the Lapp herder superintendent, Nils Klemetsen, 287, 100 of these being returnable to the Government July 1, 1907. Number of deer belonging to the Government in 1905, 32.

Where a herd of 100 is loaned to a Lapp teacher, its cash value per annum is estimated at \$600, equivalent to an annual increment of 30 fawns at \$20 each.

Cost to the Government for supplies: 1904, nothing; 1905, nothing.

Cost to the Government for superintending herds: 1904, \$600 (as above explained); 1905, \$600, rental value of herd.

Teller (Norwegian Lutheran Evangelical).—A Government station pure and simple from 1892 to 1900; a Norwegian Lutheran Evangelical Mission established there September 1, 1900; 100 deer loaned to mission for five years (the same number were returned September 1, 1905, and were marked for the Government although retained in the herd). At the time of this loan, in addition to the 100 loaned to the Norwegian Lutheran Mission there were 221 deer belonging to the Government and 339 belonging to 5 Eskimo apprentices, making, with the 100 loaned to the mission, a total of 660 deer. In 1901, November 11, 194 of the Government deer were transferred to Kotzebue to form a new station, furnishing a loan of 95 deer to the Friends mission and 99 deer to the Lapp teacher Nilima, each for five years (see Kotzebue below).

In 1904 it had 225 adult males, 469 females, and 379 fawns, making a total of 1,073. In 1905 it had 223 adult males, 426 adult females, 292 fawns, making a total of 941.

Number of deer belonging to the station in 1904, 314; in 1905, 270; number of deer owned by 5 apprentices in 1904, 351; in 1905, 434; number of deer owned by the Government in 1904, 408; in 1905, 215.

Cost to the Government for supplies: 1904, nothing; 1905, nothing; 1906, nothing.

Cost to the Government for superintending herds: 1904, \$500 (Bango, herder); \$900 (Brevig, superintendent of station); 1905, \$250 (Bango, herder).

Unalakleet (Swedish Evangelical Union).—One hundred reindeer loaned July 1, 1903; return due July 1, 1908. Ole Bahr, a Lapp, had received a loan in 1901 of 100 deer for five years, securing his services as superintendent of the herd; he brought with him to this station 197 deer, making a total of 297 deer. Parts of herds were

transferred to this herd from Eaton, Teller, and Golofnin Bay stations, increasing the herd to more than 1,500 before the year 1904.

In 1904, July 1, it had 546 adult males, 791 adult females, and 581 fawns, making a total of 1,918. In 1905 it had 678 adult males, 850 adult females, and 500 fawns, making a total of 2,028.

Number of deer belonging to the station July 1, 1905, 289; to the Government herder, Ole Bahr, 333; to 17 Eskimo apprentices, 913; number of deer belonging to the Government, 492.

Cost to the Government for supplies: 1904, nothing; 1905, nothing.

Cost to the Government for superintending herds: 1904, the rental value of Bahr's herd, \$600; salary of Bals (herder), \$500; total, \$1,100; 1905, rental value of Bahr's herd, \$600.

Bethel (Kuskokwim River; Moravian).—February 26, 1901, 176 deer were loaned to the Moravian Missionary Society, Bethel, for five years. July 1, 1901, a herd of 100 deer was loaned to Nils Persen Sara, Lapland herder, for five years' services, the same number of deer to be returned July 1, 1906. Another herd of 100 deer was loaned to Per M. Spein, Lapland herder, for five years' services, the same number to be returned July 1, 1906. Total number of deer at the station, 376.

In 1904, July 1, it had 280 adult males, 459 adult females, 307 fawns, making a total of 1,046. In 1905, July 1, it had 280 adult males, 613 adult females, and 436 fawns, making a total of 1,329 deer.

Number of deer belonging to the station in 1904, 458; to the two Lapp herders, Sara and Spein, 525; to 4 Eskimo apprentices 41; to the Government 22. Number of deer belonging to the station in 1905, July 1, 567; to the two Lapp herders, 698; to the 4 Eskimo apprentices, 64. In 1906 there will be 376 reindeer due the Government for the loans to the mission and Laplanders.

Cost to the Government for supplies: 1904, nothing; 1905, nothing; 1906, nothing.

Cost to the Government for superintending herds: 1904, \$1,200, the same being the estimated rental value of \$600 for each of the herds owned by the Lapp herders; in 1905, \$1,200 (rental value.)

Kotzebue (Society of Friends).—Ninety-five reindeer loaned September 2, 1901, for five years, the same number to be returned September 2, 1906. July 1, 1901, Alfred S. Nilima, a Lapp herder, was loaned 99 deer for five years, the same to be returned July 1, 1906, for services as herder. Total number of deer at the station, 194.

In 1904, July 1, it had 482 adult deer with 232 fawns, making a total of 714 deer. In 1905, July 1, it had 181 adult males, 315 adult females, 236 fawns, making a total of 732 deer. Two Eskimo herders, with 220 deer, had been transferred to a new station at Kivalina during the winter of 1904-5 (see Kivalina). Counting the number

transferred with the 732 deer the total without transfer would have been 952.

Number of deer belonging to the station July 1, 1904, 239; to the Lapp herder, 245; to 6 Eskimo apprentices, 230. (Due from the station and from the herder, 194 deer in 1906.) Number of deer belonging to the station in 1905, July 1, 310; to the Lapp herder, 370; to 4 Eskimo apprentices, 40; belonging to white men, 12 male deer, trained to harness and kept with the herd. (Due the Government from the station and from the herder, 194 deer in 1906.)

Cost to the Government for supplies: 1904, nothing; 1905, nothing.

Cost to the Government for superintending herds: 1904, \$600 (estimated rental value of herd); 1905, \$600, rental value of herd.

Kivalina.—In the winter of 1904-5 two native herders, Electoona with a herd of 172 deer, and Otpelle with a herd of 48 deer, making a total of 220 deer, were transferred to Kivalina, an important place on the Arctic Ocean southeast of Point Hope.

Number of deer belonging to the Government in 1905, none; belonging to the station, none; belonging to the two Eskimo apprentices, 220.

Cost to the Government for transferring herd in 1905, \$110.60.

Cost to the Government for superintending herds, nothing.

Nulato (Roman Catholic).—One hundred reindeer loaned to station March, 1901, to be returned March, 1906.

In 1904 it had 150 adults and 66 fawns, making a total of 216 deer. In 1905 it had 194 adults, 96 fawns, making a total of 290.

Cost to the Government for supplies: 1904, nothing; 1905, nothing.

Cost to the Government for superintending herds: 1904, \$500; 1905, \$500.

SUMMARY.

The present status of the mission herds is summed up in the three tables following.

Total number of deer at the mission stations, 1905.

	Adults.			Fawns.	Total.
	Male.	Female.	Total.		
Wales.....	253	416	669	273	942
Shishmaref.....	113	208	321	139	460
Deering.....	106	225	331	148	479
Golofnin Bay.....	297	511	808	356	1,164
Teller.....	223	426	649	292	941
Unalakleet.....	678	850	1,528	500	2,028
Bethel.....	280	613	893	436	1,329
Kotzebue.....	181	315	496	236	732
Kivalina.....			153	67	220
Nulato.....	47	147	194	96	290
Total.....	2,178	3,711	6,042	2,543	8,585

Cost to the Government for reindeer herds at mission stations, 1905.

	For supplies.	For superintending herd.	
		By annual rental value of deer loaned Lapp teachers, and not in cash.	By cash.
Wales.....	Nothing.		
Shishmaref.....	Nothing.		
Deering ^a	\$358.38		\$200.00
Golofnin Bay.....	Nothing.	\$600.00	
Teller.....	Nothing.		250.00
Unalakleet.....	Nothing.	600.00	
Bethel.....	Nothing.	1,200.00	
Kotzebue.....	Nothing.	600.00	
Kivalina.....	Nothing.		^b 110.60
Nulato.....	Nothing.		500.00
Total.....	258.38	3,000.00	1,060.60

^a For one year an allowance for supplies was made to the herders on account of driving the herd from Wales to Deering.

^b For transferring herd to colony.

Distribution of reindeer at mission stations, 1905.

	Belonging to station.	Lapland herders.		Apprentices and native herders.		Under direct control of Government or due from stations and herders.
		Number.	Deer belonging to them.	Number.	Deer belonging to them.	
Wales.....	216			8	537	189.
Shishmaref.....	166			7	294	
Deering.....	^a 128			3	351	100 due January, 1910.
Golofnin Bay.....	462	1	^a 287	12	383	32; 100 due July, 1907.
Teller.....	270			5	434	215.
Unalakleet (Eaton).....	^a 289	1	^a 333	17	913	492, 200 due July, 1906 and 1908.
Bethel.....	^a 567	2	^a 698	4	64	376 due February, 1906.
Kotzebue.....	^a 310	1	^a 370	4	40	194 due September, 1906.
Kivalina.....				2	220	
Nulato.....	^a 290			3		100 due March, 1906.
Total.....	^a 2,698	5	^a 1,688	65	3,236	1,070 due, 928 under direct control.

^aIncluding number due Government.

CONDITION OF HERDS AT THE RELIEF STATIONS.

Gambell (St. Lawrence Island).—During the summer of 1900, 70 reindeer from Siberia were landed at St. Lawrence Island.

Mr. Sheldon Jackson, the general agent of education in Alaska, before employment by the Bureau of Education in 1885 had labored to establish Presbyterian missions for natives in southeast Alaska.

When the reindeer experiment began he selected St. Lawrence Island and Point Barrow, and at his suggestion he was authorized by the Commissioner to offer reindeer herds to the Presbyterian missions at these two places. The Presbyterian Board of Home Missions in New York, however, found it impossible to accept the loan in either

case. They have never appointed a missionary at St. Lawrence Island and they declined to accept a reindeer herd at Point Barrow on account of the expense accompanying it. (See explanation for this under Point Barrow.)

It seems that Mr. Jackson was reluctant to give up his plan of cooperation with the Presbyterian Missionary Board at St. Lawrence and Barrow, and hoped that the successful experience with reindeer herds on the part of other missions would induce the Presbyterian Missionary Board to withdraw its objections and accept the herd on the usual conditions and support its quota of apprentices. Mr. Jackson kept the two herds in the name of the Presbyterian Missionary Board until 1905. Had the plan been adopted by the Missionary Board it would have saved to the Government the annual expense of supplies at those stations, namely, for Gambell an average of \$2,250 a year, and for Barrow an average of \$800 a year, and besides this expense for supplies it would have saved the cost of one-half of the expense for the superintending of the herd, or \$600 a year at each place, or a total of more than \$4,000 a year.

In 1904, July 1, there were in the reindeer herd on St. Lawrence Island 60 adult males, 87 adult females, 65 fawns, making a total of 212. There were 4 apprentices owning 58 deer. The Government owned 154 deer. Severe storms during the winter of 1904-5 caused great mortality among the fawns born early in the spring season. In 1905, July 1, there were 64 males, 91 females, and 34 fawns, making a total of 189.

Cost to the Government for supplies: 1904, \$3,092.58; 1905, \$888.72; 1906, \$2,776.41.

Cost to the Government for superintending herd: 1904, \$3,274.29; 1905, \$1,100; 1906, \$600.

Point Barrow (Presbyterian Mission).—In September, 1898, 100 deer were offered as a loan to the Presbyterian Board of Home Missions for their station at Point Barrow, the same number to be returned in September, 1903. The deer were left on the request of the United States agent, Sheldon Jackson, at Point Barrow by Lieutenant Jarvis, of the Revenue Service, who represented the Secretary of the Treasury in the settlement with the reindeer stations on the Arctic for reindeer borrowed by the Government for the relief expedition to Point Barrow to succor certain whaling vessels at or near that point imprisoned in the ice in the winter and spring of 1898. In August, 1899, 25 deer were given to Ojello, Eskimo herder at the station. Total deer at station, 125.

The Presbyterian board declined the loan for financial reasons, and offered instead to render all the assistance in their power to the reindeer station by selecting good apprentices and making them self-supporting so far as possible by teaching and directing them how to

gather at proper seasons and store native food (whales driven ashore, walrus, seals, wild birds, fish, etc.) in caches for winter use.

In 1905, July 1, it had 169 adult males, 298 adult females, and 162 fawns, making a total of 629 deer.

Number of deer belonging to 10 apprentices in 1905, 546; belonging to Government, 83.

Cost to the Government for supplies: 1903, \$814.99; 1904, \$855.35; 1905, nothing.

By the care of Mr. Spriggs, the present superintendent of the station, the native food supply for apprentices has been sufficient to support the 10 apprentices at that station with the aid of the Government supplies, amounting to (\$814.99 in 1903; \$815.35 in 1904, which have lasted over to end of the fiscal year 1905) \$1,630.25 for three fiscal years, the same being an average of \$543.42 per year, or \$54.34 for each apprentice, which is less than a third of the average expense to the mission stations for deer apprentices, and about one-tenth the maximum cost to the Government for such apprentices.

Cost to the Government for superintending herd: 1904, \$1,500; 1905, \$1,125.

The number of apprentices is three times as large as the size of the herd (629) warrants, and is far larger than is advisable. This has happened through the fact that no information was received at this office which gave a clue to the plan of the mission until the summer of 1905. There were two years when the Government revenue cutter could not reach Point Barrow on its summer cruise on account of ice.

Number of trained sled deer.

Station.	Number trained.	Number in training June 30, 1905.	Total.
Unalakleet.....	38	15	53
Eaton.....	32	23	55
Nulato.....	6	2	8
Kotzebue.....	40	.....	40
Bethel.....	62	.....	62
Gambell.....	20	2	22
Barrow.....	22	.....	22
Golofnin.....	52	25	77
Shishmaref.....	20	.....	20
Wales.....	41	.....	41
Deering.....	14	.....	14
Kivalina ^a.....	.....	.....	.....
Teller.....	45	16	61
Ilialna ^a.....	.....	.....	.....
Bettles ^a.....	.....	.....	.....
Total.....	392	83	475

^a No report.

APPROPRIATIONS FOR THE BUREAU OF EDUCATION.

In the following table (Parts I and II) the appropriations made by Congress for the Bureau of Education each year since its establish-

ment in 1867 are given, classified so as to show the specific object for which each sum was appropriated:

Historical table showing the appropriations for the Bureau of Education, including education and reindeer in Alaska.

PART I.

Year ended June 30.	Salaries.	Library.	Distributing documents.	Collecting statistics.	Schools in Alaska.	Reindeer in Alaska.
1867 and 1868.....	\$12,592.00	-----	-----	-----	-----	-----
1869.....	9,400.00	-----	-----	-----	-----	-----
1870.....	5,400.00	-----	-----	-----	-----	-----
1871.....	8,640.00	\$1,000.00	-----	\$3,000.00	-----	-----
1872.....	10,240.00	1,000.00	-----	13,000.00	-----	-----
1873.....	17,640.00	1,675.00	-----	13,000.00	-----	-----
1874.....	17,640.00	1,675.00	-----	13,000.00	-----	-----
1875.....	18,360.00	1,675.00	-----	11,000.00	-----	-----
1876.....	18,360.00	1,675.00	-----	11,000.00	-----	-----
1877.....	18,160.00	1,675.00	-----	8,000.00	-----	-----
1878.....	17,440.00	1,675.00	^a \$1,500.00	8,000.00	-----	-----
1879.....	17,320.00	1,675.00	^a 2,500.00	8,000.00	-----	-----
1880.....	17,320.00	1,675.00	1,000.00	7,000.00	-----	-----
1881.....	22,180.00	1,675.00	5,000.00	15,000.00	-----	-----
1882.....	25,380.00	1,675.00	6,000.00	15,000.00	-----	-----
1883.....	44,580.00	1,675.00	2,000.00	2,200.00	-----	-----
1884.....	44,580.00	1,675.00	2,000.00	2,200.00	-----	-----
1885.....	44,580.00	1,175.00	2,000.00	2,200.00	\$25,000.00	-----
1886.....	45,420.00	1,175.00	3,000.00	3,000.00	-----	-----
1887.....	45,420.00	1,175.00	2,500.00	3,000.00	15,000.00	-----
1888.....	45,420.00	1,000.00	2,500.00	2,000.00	25,000.00	-----
1889.....	45,420.00	1,000.00	2,000.00	2,500.00	40,000.00	-----
1890.....	45,420.00	1,000.00	2,000.00	2,500.00	50,000.00	-----
1891.....	47,220.00	1,000.00	2,000.00	3,000.00	50,000.00	-----
1892.....	48,620.00	1,000.00	2,000.00	3,000.00	50,000.00	-----
1893.....	48,820.00	750.00	2,000.00	2,000.00	40,000.00	-----
1894.....	48,820.00	500.00	1,500.00	1,500.00	30,000.00	\$6,000.00
1895.....	48,820.00	500.00	2,500.00	2,500.00	30,000.00	7,500.00
1896.....	51,820.00	500.00	2,500.00	2,500.00	30,000.00	7,500.00
1897.....	52,020.00	500.00	2,500.00	2,500.00	30,000.00	12,000.00
1898.....	52,020.00	500.00	2,500.00	2,500.00	30,000.00	12,000.00
1899.....	52,020.00	250.00	2,500.00	2,500.00	30,000.00	12,500.00
1900.....	52,020.00	250.00	2,500.00	2,500.00	30,000.00	25,000.00
1901.....	53,620.00	250.00	2,500.00	2,500.00	30,000.00	25,000.00
1902.....	54,120.00	250.00	2,500.00	2,500.00	35,882.00	25,000.00
1903.....	54,740.00	250.00	2,500.00	2,500.00	19,742.00	25,000.00
1904.....	52,940.00	250.00	2,500.00	2,500.00	103,377.30	25,000.00
1905.....	52,940.00	250.00	2,500.00	2,500.00	145,153.65	25,000.00
1906.....	53,140.00	250.00	2,500.00	2,500.00	50,000.00	15,000.00

^aAnd for moving Bureau.

PART II.

Year ended June 30.	Furniture and stationery.	Stationery.	Contingencies.	Fuel and lights.	Furniture.	Printing annual reports.	Rent.
1867 and 1868.....	\$6,000.00	-----	-----	-----	-----	\$84.00	-----
1869.....	^a 10,600.00	-----	-----	-----	-----	2,673.00	-----
1870.....	-----	-----	\$600.00	-----	-----	2,550.00	-----
1871.....	-----	\$600.00	1,260.00	-----	-----	5,224.00	-----
1872.....	-----	1,000.00	1,260.00	-----	-----	2,955.00	-----
1873.....	-----	1,000.00	1,260.00	\$275.00	-----	4,257.00	-----
1874.....	-----	1,000.00	1,260.00	275.00	-----	1,468.00	-----
1875.....	-----	2,000.00	1,260.00	275.00	\$1,000.00	3,720.00	-----
1876.....	-----	2,000.00	1,260.00	275.00	1,000.00	5,864.00	-----
1877.....	-----	1,500.00	700.00	275.00	750.00	2,000.00	-----
1878.....	-----	-----	700.00	275.00	750.00	3,900.00	-----
1879.....	-----	-----	700.00	275.00	750.00	-----	-----
1880.....	-----	-----	700.00	275.00	750.00	6,671.00	-----
1881.....	-----	-----	700.00	275.00	750.00	8,647.00	\$7,200.00
1882.....	-----	-----	950.00	400.00	750.00	9,647.00	6,000.00
1883.....	-----	-----	950.00	400.00	750.00	11,665.00	6,000.00
1884.....	-----	-----	2,777.00	-----	-----	10,061.00	6,000.00
1885.....	-----	-----	2,990.00	-----	-----	17,294.00	6,000.00
1886.....	-----	-----	2,025.00	-----	-----	15,664.00	6,000.00
1887.....	-----	-----	2,732.00	-----	-----	15,350.00	4,000.00
1888.....	-----	-----	1,326.00	-----	-----	10,566.00	4,000.00

^a For stationery, blank books, freight, express, library, miscellaneous items, and extra clerical help.

Historical table showing the appropriations for the Bureau of Education, including education and reindeer in Alaska—Continued.

PART II—Continued.

Year ended June 30.	Furniture and stationery.	Stationery.	Contingencies.	Fuel and lights.	Furniture.	Printing annual reports.	Rent.
1889.....			\$1,531.00			\$14,556.00	\$4,000.00
1890.....			1,510.00			15,862.00	4,000.00
1891.....			1,496.00				4,000.00
1892.....			999.00			24,111.00	4,000.00
1893.....			1,553.00				4,000.00
1894.....			1,416.00			22,258.00	4,000.00
1895.....			1,292.00			38,730.00	4,000.00
1896.....			1,035.00			25,748.00	4,000.00
1897.....			1,191.00			61,454.00	4,000.00
1898.....			1,063.00			30,976.00	4,000.00
1899.....			1,149.00			32,822.00	4,000.00
1900.....			1,207.00			32,992.00	4,000.00
1901.....			1,021.00			33,444.00	4,000.00
1902.....			1,615.00			34,466.00	4,000.00
1903.....	^a \$4,649.00		1,271.00			31,280.00	4,000.00
1904.....	^a 3,441.00		1,606.00			31,800.00	4,000.00
1905.....	^a 2,089.00		1,560.00				4,000.00
1906.....							4,000.00

^a Miscellaneous printing and binding.

All of which is respectfully submitted.

WM. T. HARRIS, *Commissioner.*

The Hon. SECRETARY OF THE INTERIOR.

STATISTICS OF STATE SCHOOL SYSTEMS.

TABLE 1.—*The total population, the school population, and the adult male population.*

State or Territory.	Estimated total popu- lation in 1904.	The school population.			Per- centage of boys.	Estimated number of male persons 21 years of age and over in 1904.
		Estimated number of children 5 to 18 years of age in 1904.				
		Boys.	Girls.	Total.		
1	2	3	4	5	6	7
United States.....	81,241,246	11,603,631	11,425,117	23,028,748	50.38	22,601,884
North Atlantic Division.....	22,502,587	2,750,754	2,748,866	5,499,620	50.02	6,699,439
South Atlantic Division.....	11,077,704	1,772,172	1,749,748	3,521,920	50.32	2,648,855
South Central Division.....	15,244,015	2,533,579	2,469,257	5,002,836	50.62	3,660,737
North Central Division.....	27,927,947	3,977,446	3,901,002	7,878,448	50.48	8,003,375
Western Division.....	4,488,993	569,680	556,244	1,125,924	50.59	1,589,478
North Atlantic Division:						
Maine.....	707,818	82,867	81,064	163,931	50.55	221,799
New Hampshire.....	425,612	45,822	46,025	91,847	49.89	135,474
Vermont.....	348,129	41,411	39,947	81,353	50.80	109,752
Massachusetts.....	3,031,906	335,161	338,529	673,690	49.75	912,176
Rhode Island.....	461,776	54,051	54,420	108,471	49.83	136,999
Connecticut.....	973,284	111,497	111,677	223,174	49.96	300,392
New York.....	7,775,182	926,379	933,445	1,859,824	49.81	2,337,799
New Jersey.....	2,039,165	255,956	258,629	514,585	49.74	607,210
Pennsylvania.....	6,719,715	897,610	885,130	1,782,740	50.35	1,937,838
South Atlantic Division:						
Delaware.....	191,231	25,748	24,947	50,695	50.79	55,917
Maryland.....	1,246,304	173,935	173,659	347,594	50.04	337,166
District of Columbia.....	298,050	31,185	33,581	64,766	48.15	89,636
Virginia.....	1,933,464	307,734	303,821	611,555	50.32	467,228
West Virginia.....	1,037,204	163,136	156,738	319,874	51.00	268,374
North Carolina.....	2,004,154	337,125	329,657	666,782	50.56	442,076
South Carolina.....	1,415,984	246,774	243,440	490,214	50.34	299,521
Georgia.....	2,367,923	395,966	333,943	729,909	50.13	534,789
Florida.....	583,390	90,539	89,962	180,501	50.16	154,148
South Central Division:						
Kentucky.....	2,262,590	354,618	345,634	700,272	50.61	572,822
Tennessee.....	2,121,856	345,296	333,486	678,782	50.87	511,802
Alabama.....	1,954,817	330,566	321,952	652,518	50.66	442,407
Mississippi.....	1,655,938	285,057	277,962	563,019	50.63	372,719
Louisiana.....	1,486,841	243,193	240,774	483,967	50.25	350,876
Texas.....	3,373,982	570,789	558,145	1,128,934	50.56	816,219
Arkansas.....	1,384,904	236,484	231,337	467,821	50.55	331,217
Oklahoma.....	526,275	84,271	80,611	164,882	51.11	144,272
Indian Territory.....	476,812	83,305	79,336	162,641	51.22	118,403
North Central Division:						
Ohio.....	4,351,633	581,259	569,748	1,151,007	50.50	1,268,410
Indiana.....	2,646,086	370,699	361,473	732,172	50.63	757,798
Illinois.....	5,219,630	716,592	712,021	1,428,613	50.16	1,517,187
Michigan.....	2,530,016	345,401	338,968	684,369	50.47	752,122
Wisconsin.....	2,219,326	331,278	327,156	658,474	50.31	612,381
Minnesota.....	1,927,838	286,087	280,310	566,397	50.51	557,901
Iowa.....	2,359,677	340,236	332,035	672,271	50.61	671,599
Missouri.....	3,277,657	487,724	477,874	965,598	50.51	903,800
North Dakota.....	370,410	56,667	54,271	110,938	51.08	110,494
South Dakota.....	422,758	66,822	64,022	130,844	51.07	118,545
Nebraska.....	1,067,756	162,971	158,851	321,822	50.64	209,904
Kansas.....	1,535,160	231,710	224,233	455,943	50.82	432,234
Western Division:						
Montana.....	283,493	31,983	31,118	63,106	50.69	118,765
Wyoming.....	104,523	13,066	11,894	24,960	52.35	42,806
Colorado.....	530,280	73,118	72,681	145,799	50.15	203,068
New Mexico.....	209,322	32,637	31,457	64,094	50.92	59,031
Arizona.....	136,807	18,063	17,297	35,365	51.09	49,041
Utah.....	303,137	49,381	49,581	98,762	50.00	73,578
Nevada.....	42,335	4,640	4,373	9,013	51.48	17,711
Idaho.....	191,060	27,941	26,759	54,700	51.08	63,671
Washington.....	582,451	74,829	72,473	147,302	50.80	219,922
Oregon.....	451,868	60,488	58,489	118,977	50.84	157,882
California.....	1,593,717	183,524	180,322	363,846	50.44	583,973

TABLE 2.—*Density of population, urban population, nativity and race classification, value of manufactures, illiteracy, and relations of the adult male and of the school population.*

[NOTE.—The statistics in this table, except those in column 12, are from the U. S. Census of 1900.]

State or Territory.	The total population.					Value of manufactured products per capita of population. ^b	The adult male population (21 years and over).				Number of children 5 to 18 years of age to every 100 persons of the total population.	
	Number of persons to a square mile.	Per cent in incorporated places of 8,000 and over.	Per cent of native and foreign white and of colored.				Number to every 100 children 5 to 18 years of age.	Per cent of illiterates (unable to write) among adult males.			1870.	1900.
			Native white.	Foreign white.	Colored. ^a			Native white.	Foreign white.	Negro.		
1	2	3	4	5	6	7	8	9	10	11	12	13
United States..	25.6	32.6	74.4	13.4	12.2	\$74.53	98.3	4.9	11.5	47.4	31.3	28.3
North Atlantic Div..	129.8	57.0	75.6	22.5	1.9	140.22	121.8	2.0	15.2	15.3	28.3	24.4
South Atlantic Div..	38.9	17.0	62.2	2.0	35.8	35.48	75.2	11.5	11.3	51.1	33.0	31.8
South Central Div..	23.1	11.4	67.2	2.5	30.3	20.44	73.1	11.1	18.8	52.5	33.9	32.8
North Central Div..	34.9	30.6	82.1	15.8	2.1	68.08	101.6	2.9	7.9	24.8	32.4	28.2
Western Division....	3.5	31.2	76.1	18.6	5.3	63.96	141.1	2.4	7.7	13.4	25.6	25.1
North Atlantic Div.:												
Maine.....	23.2	23.7	86.3	13.4	.3	84.23	135.3	3.1	21.4	17.3	28.0	23.2
New Hampshire.....	45.7	38.6	78.4	21.4	.2	127.22	147.5	2.0	24.0	14.8	24.8	21.6
Vermont.....	37.6	11.2	86.7	13.0	.3	80.80	134.9	4.1	23.3	19.7	27.2	23.4
Massachusetts.....	348.9	67.0	68.8	29.9	1.3	171.99	135.4	.9	13.8	10.5	25.5	22.2
Rhode Island.....	407.0	66.1	66.6	31.2	2.2	204.60	126.3	2.0	18.2	15.4	25.7	23.5
Connecticut.....	187.5	52.0	72.1	26.1	1.8	184.04	134.6	1.0	15.6	13.1	25.9	22.9
New York.....	152.6	68.5	72.5	26.0	1.5	141.97	125.7	1.8	12.1	11.3	28.1	23.9
New Jersey.....	250.3	61.2	73.4	22.8	3.8	133.15	118.0	2.3	13.4	18.3	29.0	25.0
Pennsylvania.....	140.1	45.5	81.9	15.6	2.5	125.73	108.7	2.5	20.2	17.5	30.6	26.5
South Atlantic Div.:												
Delaware.....	94.3	41.4	75.9	7.5	16.6	101.42	110.3	7.1	17.6	42.7	31.8	26.5
Maryland.....	120.5	46.9	72.3	7.9	19.8	82.62	97.0	5.1	10.7	40.5	31.3	27.9
Dist. of Columbia.....	4,645.3	100.0	61.7	7.0	31.3	101.53	138.4	.9	5.0	26.1	27.0	21.7
Virginia.....	46.2	14.7	63.3	1.0	35.7	30.91	76.4	12.2	10.5	52.2	32.4	31.6
West Virginia.....	38.9	7.7	93.1	2.4	4.5	33.20	83.9	10.7	22.5	37.8	34.1	30.8
North Carolina.....	39.0	5.1	66.5	.2	33.3	22.10	66.3	18.9	5.7	53.1	33.6	33.3
South Carolina.....	44.4	7.5	41.2	.4	58.4	18.44	61.1	12.3	5.2	54.7	33.2	34.6
Georgia.....	37.6	11.0	52.7	.6	46.7	21.85	67.7	11.8	5.6	56.4	34.4	33.4
Florida.....	9.7	15.0	52.6	3.7	43.7	40.06	85.4	8.3	9.2	39.4	34.0	30.9
South Central Div.:												
Kentucky.....	53.7	16.9	84.4	2.3	13.3	33.22	81.8	14.3	8.6	49.5	34.4	31.0
Tennessee.....	48.4	13.4	75.3	.9	23.8*	21.92	75.4	14.1	7.7	47.6	34.1	32.0
Alabama.....	35.5	7.3	53.9	.8	45.3	20.04	67.8	13.8	8.0	59.5	34.4	33.4
Mississippi.....	33.5	2.6	40.8	.5	58.7	12.08	66.2	8.1	9.5	53.2	33.7	34.0
Louisiana.....	30.4	22.8	49.1	3.7	47.2	28.14	72.5	16.9	24.6	61.3	31.1	32.6
Texas.....	11.6	11.3	73.8	5.8	20.4	17.16	72.3	5.8	25.4	45.1	34.8	33.5
Arkansas.....	24.7	5.4	70.9	1.1	28.0	16.19	70.8	10.5	6.4	44.8	34.2	33.8
Oklahoma.....	10.3	5.0	88.4	3.9	7.7	6.61	87.5	2.7	6.3	32.0	.....	31.3
Indian Territory.....	12.6	0.0	76.0	1.2	22.8	4.25	72.8	10.7	16.8	41.3	.....	34.1
North Central Div.:												
Ohio.....	102.0	38.5	86.7	11.0	2.3	92.50	110.2	3.2	9.6	21.8	31.7	26.5
Indiana.....	70.1	24.2	92.1	5.6	2.3	64.84	103.5	4.4	9.6	27.7	33.8	27.7
Illinois.....	86.1	47.1	78.2	20.0	1.8	107.84	106.2	2.8	7.8	18.7	32.2	27.4
Michigan.....	42.2	30.9	76.8	22.3	.9	65.01	109.9	2.4	10.2	14.0	30.3	27.1
Wisconsin.....	38.0	30.7	74.6	24.9	.5	73.45	93.0	1.9	9.3	12.7	33.6	29.7
Minnesota.....	22.1	26.8	70.4	28.8	.8	50.95	98.5	1.0	6.4	6.9	32.5	29.4
Iowa.....	40.2	16.8	85.7	13.7	.6	28.43	99.9	1.6	5.2	22.0	33.1	28.5
Missouri.....	45.2	30.8	87.9	6.9	5.2	54.88	93.6	5.4	6.8	31.9	33.6	29.5
North Dakota.....	4.5	3.0	62.4	35.3	2.3	11.18	99.6	1.0	6.3	16.5	.....	30.0
South Dakota.....	5.2	2.6	72.8	22.0	5.2	10.97	90.6	.8	4.9	16.3	23.7	31.0
Nebraska.....	13.9	15.8	82.5	16.6	.9	39.19	93.5	1.0	5.1	11.6	28.1	30.1
Kansas.....	18.0	14.0	87.7	8.6	3.7	29.00	94.8	1.7	6.4	28.1	29.8	29.7
Western Division:												
Montana.....	1.7	27.0	67.4	25.6	7.0	100.17	188.2	.8	6.7	10.4	10.2	22.3
Wyoming.....	.9	24.1	78.3	17.9	3.8	26.11	171.5	.8	7.8	21.2	9.4	23.9
Colorado.....	5.2	38.1	81.2	16.8	2.0	66.60	139.3	2.4	7.1	13.9	22.5	24.7
New Mexico.....	1.6	0.0	85.5	6.8	7.7	13.78	92.1	23.6	30.9	16.3	31.9	30.6
Arizona.....	1.1	0.0	57.4	18.2	24.4	104.54	138.7	4.5	30.9	11.1	16.8	25.9
Utah.....	3.4	25.2	79.4	19.1	1.5	30.00	74.5	1.2	4.6	4.7	35.1	32.6
Nevada.....	.4	0.0	63.3	20.3	16.4	19.31	196.5	.8	7.0	22.9	12.6	21.3
Idaho.....	1.9	0.0	82.0	13.5	4.5	12.15	116.4	1.1	5.7	15.4	11.3	28.6
Washington.....	7.7	31.9	76.1	19.7	4.2	72.76	149.3	.5	3.9	11.5	27.0	25.3
Oregon.....	4.4	23.9	82.4	13.0	4.6	48.10	132.7	1.1	3.4	9.5	32.3	26.3
California.....	9.5	43.7	73.2	21.3	5.5	77.27	160.5	1.1	8.1	14.6	24.5	22.8

^a Including Mongolians and Indians.

^b Less cost of raw material.

TABLE 3.—*School ages in the several States—State school censuses.*

State or Territory.	Age for free attendance at the public schools.	Age for compulsory attendance. ^a	School census.				
			Date of latest school census reported.	Age of persons enumerated.	Number of persons enumerated.		
					Boys.	Girls.	Total.
1	2	3	4	5	6	7	8
North Atlantic Division:							
Maine.....	5-21	7-15	1904	5-21	.....	.....	206,214
New Hampshire.....	5- ^b	8-14	1904	5-16	31,728	31,413	63,141
Vermont.....	(^b)	8-15	1904	5-18	39,997	38,718	78,715
Massachusetts.....	(^b)	7-14	1903	5-15	251,882	254,227	506,109
Rhode Island.....	(^b)	7-13	1904	5-15	46,701	46,539	93,240
Connecticut.....	(^b)	7-14	1903	4-16	.....	.....	213,014
New York.....	5-21	8-16	1904	5-18	878,682	882,304	1,760,986
New Jersey.....	4-20	7-14	(^c)	.....	.....	.....	.....
Pennsylvania (1902).....	6-21	8-16	1902	6-16	.....	.....	1,004,728
South Atlantic Division:							
Delaware (1893).....	6-21	(^d)	1893	6-21	15,827	17,758	33,585
Maryland (1902).....	6-21	^e 8-16	(^c)	.....	.....	.....	.....
District of Columbia.....	6-17	8-14	^f 1904	6-17	^f 28,703	^f 31,058	^f 59,761
Virginia (1903).....	5-21	.....	1900	5-21	354,722	336,590	691,312
West Virginia.....	6-21	8-14	1904	6-21	169,124	157,116	326,240
North Carolina.....	6-21	(^d)	1903	6-21	.....	.....	686,009
South Carolina.....	6-21	(^d)	(^c)	.....	.....	.....	.....
Georgia (1903).....	6-18	(^d)	1903	6-18	353,608	349,525	703,133
Florida.....	6-21	(^d)	1900	6-21	.....	.....	182,600
South Central Division:							
Kentucky (1903).....	6-20	7-14	1903	6-20	304,255	291,332	595,587
Tennessee.....	6-21	(^d)	1904	6-21	388,516	378,206	776,722
Alabama (1902).....	7-21	(^d)	1901	7-21	.....	.....	676,285
Mississippi (1903).....	5-21	(^d)	1902	5-21	314,545	313,850	628,395
Louisiana (1903).....	6-18	(^d)	1899	6-18	209,154	195,603	404,757
Texas.....	7-17	(^d)	1904	8-17	398,794	383,899	782,693
Arkansas.....	6-21	(^d)	1904	6-21	262,893	254,540	517,433
Oklahoma.....	6-21	(^d)	1904	6-21	105,522	99,194	204,716
Indian Territory (1902) ^g.....	.....	(^d)	1901	5-21	79,915	76,501	156,416
North Central Division:							
Ohio.....	6-21	8-16	1904	6-21	641,186	609,621	1,250,807
Indiana.....	6-21	6-14	1904	6-21	396,780	372,062	768,842
Illinois.....	6-21	7-14	1904	6-21	730,745	718,591	1,449,336
Michigan.....	5-20	7-15	1904	5-20	376,583	368,427	745,010
Wisconsin.....	4-20	7-14	1904	4-20	388,716	377,832	766,548
Minnesota.....	6-21	8-16	(^c)	.....	.....	.....	.....
Iowa.....	5-21	7-14	1904	5-21	365,823	357,543	723,366
Missouri.....	6-20	(^d)	1904	6-20	505,582	489,668	995,250
North Dakota.....	6-20	8-14	1904	6-20	61,213	57,599	118,812
South Dakota.....	6-21	8-14	1904	6-21	70,608	66,388	136,996
Nebraska.....	5-21	7-15	1904	5-21	192,523	186,491	379,014
Kansas.....	5-21	8-15	1904	5-21	254,630	246,264	500,894
Western Division:							
Montana (1903).....	6-21	8-14	1903	6-21	32,813	31,810	64,623
Wyoming (1900).....	6-21	7-16	(^c)	.....	.....	.....	.....
Colorado.....	6-21	8-14	1904	6-21	90,463	89,012	179,475
New Mexico.....	5-21	7-14	1904	5-21	36,106	32,294	68,400
Arizona.....	6-21	8-14	1904	6-21	13,959	13,365	27,324
Utah.....	6-18	8-14	1904	6-18	45,939	45,743	91,682
Nevada.....	6-18	8-14	1904	6-18	4,851	4,579	9,430
Idaho.....	5-21	8-14	1904	5-21	34,537	34,000	68,537
Washington.....	6-21	8-15	1904	5-21	99,928	96,419	196,347
Oregon.....	6-21	8-14	1904	4-20	75,063	73,657	148,720
California.....	^h 6-21	6-14	1904	5-17	207,450	199,948	407,398

^a The compulsory period here given is in many cases extended or shortened under certain circumstances.

^b Not limited by law.

^c No State school census.

^d No compulsory law.

^e Applies only to Baltimore city and Allegany County.

^f Estimated for 1904.

^g Returns imperfect.

^h May be extended.

TABLE 4.—*Number of pupils enrolled in the common schools at different dates and the relation of the enrollment to the school population.*

State or Territory.	Number of different pupils of all ages enrolled during the school year (excluding duplicate enrollments).					Per cent of school population (i. e., of children 5 to 18 years of age) enrolled.				
	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.
1	2	3	4	5	6	7	8	9	10	11
United States.	7,561,582	9,867,505	12,722,581	15,503,110	16,256,038	61.45	65.50	68.61	72.43	70.59
North Atlantic Div.	2,743,344	2,930,345	3,112,622	3,643,949	3,843,908	77.95	75.17	70.45	70.86	69.89
South Atlantic Div.	603,619	1,242,811	1,785,486	2,182,615	2,324,906	30.51	50.74	59.22	65.73	66.01
South Central Div.	767,839	1,371,975	2,293,579	3,018,609	3,235,121	34.17	46.43	69.14	67.28	64.66
North Central Div.	3,300,660	4,033,828	5,015,217	5,842,569	5,895,631	76.87	75.84	76.46	78.65	74.82
Western Div.	146,120	288,546	515,677	815,368	956,472	54.77	64.96	70.01	79.51	84.95
North Atlantic Div.:										
Maine.	a 132,600	149,827	139,676	130,918	131,176	a 87.35	89.80	85.88	81.38	80.02
New Hampshire.	71,957	64,341	59,813	65,688	65,673	91.31	81.32	71.28	73.98	71.50
Vermont.	b 65,384	75,238	b 65,608	65,964	66,535	.....	87.21	.....	82.15	81.78
Massachusetts.	273,661	306,777	371,492	474,891	494,042	72.34	71.76	72.56	76.21	73.33
Rhode Island.	a 34,000	40,004	52,774	67,231	70,843	a 59.24	59.59	62.65	66.79	65.31
Connecticut.	113,588	119,694	126,505	155,228	163,141	80.83	76.97	72.02	74.54	73.10
New York.	1,028,110	1,031,593	1,042,100	1,209,574	1,300,065	82.98	77.10	70.71	69.57	69.90
New Jersey.	169,430	204,961	234,072	322,575	352,203	63.20	64.77	62.21	68.52	68.44
Pennsylvania.	834,614	937,310	1,020,522	1,151,880	1,200,230	76.35	74.37	69.53	68.90	67.33
South Atlantic Div.:										
Delaware.	20,058	27,823	31,434	36,895	c 36,895	50.04	65.20	66.19	75.33	c 75.33
Maryland.	115,683	162,431	184,251	222,373	209,978	46.70	58.13	60.37	67.00	60.41
Dist. Columbia.	15,157	26,439	36,906	46,519	49,789	41.60	55.40	63.10	76.81	76.88
Virginia.	131,088	220,736	342,269	370,595	d 375,601	32.34	45.00	60.51	63.19	d 61.94
West Virginia.	76,999	142,850	193,064	232,343	244,040	49.47	69.21	75.27	78.58	76.29
North Carolina.	a 115,000	252,612	322,533	400,452	491,838	a 31.23	55.87	56.39	63.55	73.76
South Carolina.	66,056	134,072	201,260	281,891	292,115	27.28	40.56	47.08	60.74	59.59
Georgia.	49,578	236,533	381,297	482,673	d 502,014	11.89	46.24	58.45	65.30	d 64.33
Florida.	14,000	39,315	92,472	108,874	122,636	21.21	44.16	71.10	66.57	67.94
South Central Div.:										
Kentucky.	e 178,457	e 276,000	399,660	500,294	a d 501,482	.....	.....	65.64	75.27	a d 72.52
Tennessee.	a 140,000	300,217	447,950	485,354	502,330	a 32.00	58.21	74.05	75.09	74.00
Alabama.	141,312	179,490	301,615	376,423	f 365,171	40.36	42.60	55.83	61.67	f 57.01
Mississippi.	117,000	236,654	334,158	386,507	d 403,647	40.60	61.29	70.62	73.27	d 72.84
Louisiana.	57,639	77,642	120,253	196,169	a 208,737	24.78	25.87	31.58	43.62	d 43.85
Texas.	63,504	a 220,000	466,872	659,598	722,904	21.00	a 42.40	59.50	64.67	64.03
Arkansas.	69,927	81,972	223,071	314,662	339,542	40.29	30.81	55.41	71.02	72.58
Oklahoma.	.....	.....	.....	99,602	152,886	.....	.....	.....	79.82	92.72
Indian Ter. g.	.....	.....	.....	.....	a 38,422	.....	.....	.....	a 23.62	.....
North Central Div.:										
Ohio.	719,372	729,499	797,489	829,160	835,607	84.04	76.69	76.54	75.40	72.60
Indiana.	450,057	511,283	512,955	564,807	550,732	78.64	82.39	79.21	81.10	75.22
Illinois.	672,787	704,041	778,319	958,911	978,554	81.01	74.61	71.97	72.68	68.50
Michigan.	292,466	362,556	427,032	504,985	497,299	79.66	78.08	73.45	77.13	72.67
Wisconsin.	265,285	299,457	351,723	445,142	461,214	73.92	73.78	69.77	72.51	70.04
Minnesota.	113,983	180,248	250,960	399,207	423,663	75.92	75.87	74.59	77.59	74.80
Iowa.	341,938	426,057	493,267	566,223	545,940	84.44	83.52	85.51	89.06	81.21
Missouri.	330,070	482,986	620,314	719,817	731,410	56.03	68.85	74.43	78.63	75.75
North Dakota.	.....	.....	35,543	77,686	95,224	.....	.....	71.26	81.26	85.84
South Dakota.	a 1,000	13,718	78,043	98,822	106,822	a 39.26	41.68	81.04	79.49	81.64
Nebraska.	23,265	92,549	240,300	288,227	278,930	58.79	68.48	75.35	89.50	86.70
Kansas.	89,777	231,434	399,322	389,582	a 390,236	74.22	73.23	88.56	89.21	a 85.59
Western Div.:										
Montana.	a 1,657	4,270	16,980	39,430	d 44,881	70.24	63.77	71.14	72.80	d 72.63
Wyoming.	a 450	2,907	7,032	14,512	c 14,512	a 45.34	77.44	54.46	65.66	c 65.66
Colorado.	4,357	22,119	65,490	117,555	134,260	42.28	60.82	72.20	88.19	92.08
New Mexico.	a 1,320	4,755	18,215	36,735	39,704	0.42	13.32	42.25	61.43	61.95
Arizona.	0	4,212	7,989	16,504	21,088	0.00	53.16	52.72	51.94	59.63
Utah.	16,992	24,326	37,279	73,042	75,662	53.36	50.61	55.26	81.02	76.61
Nevada.	3,106	9,045	7,387	6,676	7,319	53.97	79.73	73.80	74.06	81.20
Idaho.	906	5,834	14,311	36,669	54,480	46.06	67.85	62.66	79.18	99.60
Washington.	a 5,000	14,780	55,964	115,104	161,651	a 69.00	72.36	70.58	87.86	109.74
Oregon.	21,000	37,533	63,254	89,405	103,877	67.73	75.02	74.78	82.13	87.31
California.	91,332	158,765	221,756	209,736	299,038	63.63	73.37	77.38	79.56	82.19

a Approximate.

b Pupils of legal school age only.

c In 1899-1900.

d In 1902-3.

e Highest number enrolled.

f In 1901-2.

g Returns imperfect.

TABLE 5.—*The school enrollment of 1903-4, classified by sex. Percentage of the total population enrolled at different dates.*

State or Territory.	Number of different pupils of all ages enrolled.			Per cent of the total population enrolled.				
	Boys.	Girls.	Total.	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.
1	2	3	4	5	6	7	8	9
United States	<i>a</i> 8, 169, 618	<i>a</i> 8, 086, 420	16, 256, 038	19. 14	19. 67	20. 32	20. 51	20. 01
North Atlantic Division.	<i>a</i> 1, 929, 275	<i>a</i> 1, 914, 633	3, 843, 908	21. 95	20. 20	17. 89	17. 31	17. 08
South Atlantic Division.	<i>a</i> 1, 153, 140	<i>a</i> 1, 171, 766	2, 324, 906	10. 05	16. 36	20. 16	20. 90	20. 99
South Central Division.	<i>a</i> 1, 621, 500	<i>a</i> 1, 613, 621	3, 235, 121	11. 56	15. 38	20. 90	22. 05	21. 22
North Central Division.	<i>a</i> 2, 979, 734	<i>a</i> 2, 915, 897	5, 895, 631	24. 80	23. 23	22. 43	22. 19	21. 11
Western Division.	<i>a</i> 485, 969	<i>a</i> 470, 503	956, 472	13. 99	16. 32	17. 03	19. 93	21. 31
North Atlantic Division:								
Maine.....			131, 176	24. 25	23. 09	21. 13	18. 85	18. 53
New Hampshire.....	33, 216	32, 457	65, 673	22. 41	18. 54	15. 89	15. 96	15. 43
Vermont.....	33, 629	32, 906	66, 535	<i>b</i> 19. 77	22. 64	<i>b</i> 19. 74	19. 20	19. 11
Massachusetts.....			494, 042	18. 31	17. 20	16. 59	16. 93	16. 29
Rhode Island.....	35, 769	35, 074	70, 843	15. 11	14. 69	15. 27	15. 69	15. 34
Connecticut.....			163, 141	20. 83	19. 22	16. 95	17. 09	16. 76
New York.....	654, 082	645, 983	1, 300, 065	23. 18	20. 30	17. 37	16. 64	16. 72
New Jersey.....	176, 798	175, 405	352, 203	18. 26	18. 12	16. 20	17. 12	17. 10
Pennsylvania.....	602, 181	598, 049	1, 200, 230	23. 24	21. 89	19. 41	18. 28	17. 86
South Atlantic Division:								
Delaware.....			<i>c</i> 36, 895	15. 79	18. 98	18. 66	19. 98	<i>c</i> 19. 98
Maryland.....			209, 978	14. 55	17. 37	17. 68	18. 72	16. 85
District of Columbia.	23, 605	26, 184	49, 789	11. 23	14. 88	16. 02	16. 69	16. 70
Virginia.....			<i>d</i> 375, 601	10. 47	14. 59	20. 67	19. 99	<i>d</i> 19. 57
West Virginia.....	125, 721	118, 319	244, 040	16. 85	23. 10	25. 31	24. 23	23. 53
North Carolina.....	246, 969	244, 869	491, 838	10. 45	18. 05	19. 93	21. 14	24. 54
South Carolina.....	138, 021	154, 094	292, 115	9. 05	13. 46	17. 49	21. 03	20. 63
Georgia.....	245, 608	256, 406	<i>d</i> 502, 014	4. 08	15. 34	20. 75	21. 78	<i>d</i> 21. 49
Florida.....	60, 402	62, 234	122, 636	7. 19	14. 59	23. 63	20. 60	21. 02
South Central Division:								
Kentucky.....	250, 521	250, 961	<i>d e</i> 501, 482	13. 21	16. 74	21. 50	23. 30	<i>d e</i> 22. 48
Tennessee.....	252, 038	250, 292	502, 330	10. 90	19. 46	25. 34	24. 02	23. 67
Alabama.....			<i>f</i> 365, 171	13. 85	14. 22	19. 93	20. 59	<i>f</i> 19. 03
Mississippi.....	199, 404	204, 243	<i>d</i> 403, 647	13. 70	20. 91	25. 92	24. 92	<i>d</i> 24. 77
Louisiana.....	104, 527	104, 210	<i>d</i> 208, 737	7. 73	8. 26	10. 75	14. 20	<i>d</i> 14. 29
Texas.....	360, 253	362, 651	722, 904	7. 26	13. 82	20. 88	21. 64	21. 43
Arkansas.....	171, 401	168, 141	339, 542	13. 72	10. 21	19. 77	23. 99	24. 52
Oklahoma.....	78, 680	74, 206	152, 886				25. 01	29. 05
Indian Territory <i>g</i>			<i>e</i> 38, 422					<i>e</i> 8. 06
North Central Division:								
Ohio.....	426, 790	408, 817	835, 607	26. 50	22. 81	21. 72	19. 94	19. 20
Indiana.....	277, 812	272, 920	550, 732	26. 34	25. 85	23. 40	22. 44	20. 81
Illinois.....	492, 905	485, 649	978, 554	25. 99	22. 88	20. 34	19. 89	18. 75
Michigan.....	248, 742	248, 557	497, 299	23. 98	22. 15	20. 39	20. 86	19. 66
Wisconsin.....	232, 733	228, 481	461, 214	24. 60	22. 76	20. 85	21. 51	20. 78
Minnesota.....			423, 663	24. 47	23. 09	21. 58	22. 79	21. 98
Iowa.....			545, 940	28. 19	26. 23	25. 80	25. 37	23. 14
Missouri.....	366, 585	364, 825	731, 410	18. 74	22. 27	23. 15	23. 17	22. 32
North Dakota.....	49, 396	45, 828	95, 224	9. 34	10. 15	19. 45	24. 34	25. 71
South Dakota.....	54, 889	51, 933	106, 822			23. 74	24. 60	25. 27
Nebraska.....	141, 883	137, 047	278, 930	16. 61	20. 46	22. 69	27. 03	26. 12
Kansas.....	197, 707	192, 529	<i>e</i> 390, 236	22. 28	23. 23	27. 98	26. 49	<i>e</i> 25. 42
Western Division:								
Montana.....			<i>d</i> 44, 881	7. 54	10. 90	12. 85	16. 20	<i>d</i> 16. 20
Wyoming.....	7, 359	7, 153	<i>c</i> 14, 512	4. 55	13. 98	11. 62	15. 68	<i>c</i> 15. 68
Colorado.....	66, 563	67, 697	134, 260	9. 33	11. 38	15. 89	21. 78	22. 75
New Mexico.....	21, 948	17, 756	39, 704	1. 40	3. 98	11. 86	18. 81	18. 97
Arizona.....	10, 860	10, 228	21, 088	0. 00	10. 42	13. 40	13. 42	15. 41
Utah.....	38, 008	37, 654	75, 662	18. 61	16. 90	17. 93	26. 39	24. 96
Nevada.....	3, 636	3, 683	7, 319	7. 04	14. 53	16. 14	15. 77	17. 29
Idaho.....	27, 521	26, 959	54, 480	5. 59	17. 89	16. 96	22. 67	28. 51
Washington.....	82, 140	79, 511	161, 651	18. 62	19. 68	16. 02	22. 22	27. 75
Oregon.....	52, 873	51, 004	103, 877	21. 63	21. 47	20. 16	21. 62	22. 99
California.....	152, 311	146, 727	299, 038	15. 61	18. 36	18. 36	18. 16	18. 76

a Estimated in part.*b* Pupils of legal school age.*c* In 1899-1900.*d* In 1902-3.*e* Approximate.*f* In 1901-2.*g* Returns imperfect.

TABLE 6.—*Per cent of the school population (i. e., children 5 to 18 years of age) enrolled in the public schools, for a period of years.*

Year.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71.....	61.45	77.95	30.51	34.17	76.87	54.77
1871-72.....	62.20	77.33	32.27	37.94	77.04	54.43
1872-73.....	62.36	76.79	35.86	38.67	75.97	57.52
1873-74.....	64.40	77.77	42.10	40.82	76.98	61.04
1874-75.....	65.54	78.59	44.61	42.47	77.54	64.39
1875-76.....	64.70	78.55	46.72	37.36	77.05	66.37
1876-77.....	63.92	76.83	47.02	38.51	75.60	66.12
1877-78.....	65.75	77.09	48.85	43.50	77.38	66.26
1878-79.....	64.64	76.18	46.72	44.71	75.28	65.63
1879-80.....	65.50	75.17	50.74	46.43	75.84	64.96
1880-81.....	65.03	74.28	51.49	47.03	74.59	64.82
1881-82.....	65.03	74.56	51.90	47.02	74.15	65.93
1882-83.....	66.39	74.15	54.30	50.68	75.13	67.05
1883-84.....	66.96	72.83	56.25	53.59	75.06	68.01
1884-85.....	67.96	73.23	57.17	56.57	75.46	68.53
1885-86.....	68.14	72.63	57.68	56.82	76.08	68.03
1886-87.....	67.98	72.23	58.98	56.21	75.77	67.97
1887-88.....	68.33	71.60	58.68	58.67	75.96	68.53
1888-89.....	68.20	70.60	58.40	58.28	76.63	69.39
1889-90.....	68.61	70.45	59.22	60.14	76.46	70.01
1890-91.....	69.40	70.04	60.15	63.01	76.25	75.49
1891-92.....	69.51	69.78	59.50	63.72	76.30	77.98
1892-93.....	69.70	68.99	61.94	63.92	76.23	77.16
1893-94.....	71.32	70.45	63.08	66.00	78.04	77.45
1894-95.....	71.54	71.53	62.21	65.83	78.17	79.32
1895-96.....	71.80	71.57	62.46	66.75	78.16	79.72
1896-97.....	72.36	72.12	64.49	67.75	78.06	78.27
1897-98.....	72.68	71.78	66.25	67.36	78.66	78.00
1898-99.....	71.96	71.69	64.93	66.54	77.75	77.85
1899-1900.....	72.43	70.86	65.73	67.28	78.65	79.51
1900-1901.....	71.67	70.71	66.65	65.22	77.36	80.69
1901-2.....	71.45	70.31	66.55	65.12	76.85	82.49
1902-3 ^a	70.67	69.84	65.99	64.60	75.49	82.46
1903-4 ^a	70.59	69.89	66.01	64.66	74.82	84.95

^a Subject to correction.

TABLE 7.—*The average daily attendance at various periods, and its relation in 1903-4 to the enrollment*

State or Territory.	Average number of pupils actually present at school each day.					Number attending daily for each 100 enrolled in 1903-4.
	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.	
1	2	3	4	5	6	7
United States.....	4,545,317	6,144,143	8,153,635	10,632,772	11,318,256	69.62
North Atlantic Division.....	1,627,208	1,824,487	2,036,459	2,636,892	2,866,074	74.56
South Atlantic Division.....	368,111	776,798	1,126,683	1,344,334	1,503,917	64.69
South Central Division.....	535,632	902,767	1,467,649	2,015,457	2,074,304	64.12
North Central Division.....	1,911,720	2,451,167	3,188,732	4,080,460	4,188,517	71.04
Western Division.....	102,646	188,924	334,112	555,629	685,444	71.66
North Atlantic Division:						
Maine.....	100,392	103,115	98,364	97,697	98,257	74.90
New Hampshire.....	48,150	48,966	41,526	47,276	48,673	74.11
Vermont.....	<i>a</i> 44,100	48,606	45,887	47,020	48,845	73.41
Massachusetts.....	201,750	233,127	273,910	366,136	391,771	79.30
Rhode Island.....	22,485	27,217	33,905	47,124	51,692	72.97
Connecticut.....	62,683	73,546	83,656	111,564	123,317	75.59
New York.....	493,648	573,089	642,984	857,488	963,780	74.13
New Jersey.....	86,812	115,194	133,286	207,947	239,505	68.00
Pennsylvania.....	567,188	601,627	682,941	854,640	900,234	75.01
South Atlantic Division:						
Delaware.....	<i>a</i> 12,700	17,439	19,649	<i>a</i> 25,300	<i>a b</i> 25,300	<i>a b</i> 68.57
Maryland.....	56,435	85,778	102,351	134,400	130,065	61.94
District of Columbia.....	10,261	20,637	28,184	35,463	39,300	78.93
Virginia.....	77,402	128,404	198,290	216,464	<i>c</i> 224,769	<i>c</i> 59.84
West Virginia.....	51,336	91,004	121,700	151,254	158,264	64.85
North Carolina.....	<i>a</i> 73,000	170,100	203,100	206,918	<i>a</i> 318,055	<i>a</i> 64.67
South Carolina.....	<i>a</i> 44,700	<i>a</i> 90,600	147,799	201,295	214,133	73.30
Georgia.....	31,377	145,190	240,791	298,237	<i>c</i> 310,400	<i>c</i> 61.83
Florida.....	<i>a</i> 10,900	27,046	64,819	75,003	83,631	68.19
South Central Division:						
Kentucky.....	120,866	178,000	225,739	310,339	<i>a c</i> 309,836	<i>a c</i> 61.78
Tennessee.....	<i>a</i> 89,000	208,528	323,548	338,566	344,882	68.66
Alabama.....	107,666	117,978	182,467	297,805	<i>d</i> 240,000	<i>d</i> 65.72
Mississippi.....	90,000	156,761	207,704	224,526	<i>c</i> 233,175	<i>c</i> 57.77
Louisiana.....	<i>a</i> 40,500	<i>a</i> 54,800	87,536	146,323	<i>c</i> 155,794	<i>c</i> 74.64
Texas.....	<i>a</i> 41,000	<i>a</i> 132,000	291,941	438,779	461,938	63.90
Arkansas.....	<i>a</i> 46,600	<i>a</i> 54,700	<i>a</i> 148,714	195,401	212,131	62.48
Oklahoma.....				63,718	93,495	61.15
Indian Territory <i>e</i>					<i>a</i> 23,053	<i>a</i> 60.00
North Central Division:						
Ohio.....	432,452	476,279	549,269	616,365	618,495	74.02
Indiana.....	295,071	321,659	342,275	429,566	416,047	75.54
Illinois.....	341,686	431,638	538,310	737,576	783,563	80.07
Michigan.....	<i>a</i> 193,000	<i>a</i> 240,000	<i>a</i> 282,000	355,226	<i>a</i> 388,092	<i>a</i> 78.04
Wisconsin.....	<i>a</i> 132,000	<i>a</i> 156,000	200,457	<i>a</i> 309,800	<i>a</i> 288,300	<i>a</i> 62.51
Minnesota.....	50,694	<i>a</i> 78,400	127,025	243,224	272,500	64.32
Iowa.....	211,562	259,836	306,309	373,474	373,023	68.33
Missouri.....	187,024	<i>a</i> 281,000	384,627	460,012	464,706	63.54
North Dakota.....	} <i>a</i> 1,040	8,530	20,694	43,560	58,442	61.37
South Dakota.....			48,327	<i>a</i> 68,000	<i>a</i> 73,700	<i>a</i> 68.99
Nebraska.....	<i>a</i> 14,300	60,156	146,139	181,874	180,771	64.81
Kansas.....	52,891	137,669	243,300	261,783	<i>a</i> 270,878	<i>a</i> 69.41
Western Division:						
Montana.....	<i>a</i> 1,100	<i>a</i> 3,000	10,596	<i>a</i> 26,300	<i>c</i> 31,471	<i>c</i> 70.12
Wyoming.....	<i>a</i> 250	1,920	<i>a</i> 4,700	<i>a</i> 9,650	<i>a b</i> 9,650	<i>a b</i> 66.50
Colorado.....	2,611	12,618	38,715	73,291	95,117	70.85
New Mexico.....	<i>a</i> 880	3,150	<i>a</i> 13,000	22,433	29,582	74.51
Arizona.....	0	2,847	4,702	10,177	13,022	61.75
Utah.....	12,819	17,173	20,967	50,595	56,183	74.26
Nevada.....	<i>a</i> 1,800	5,401	5,064	5,698	5,182	70.80
Idaho.....	<i>a</i> 600	3,863	<i>a</i> 9,500	21,962	39,817	73.09
Washington.....	<i>a</i> 3,300	10,546	36,946	74,717	110,774	68.53
Oregon.....	<i>a</i> 15,000	27,435	43,333	64,411	72,464	69.76
California.....	64,286	100,966	146,589	197,595	222,182	74.50

a Approximately.*b* In 1899-1900.*c* In 1902-3.*d* In 1901-2.*e* Returns imperfect.

TABLE 8.—(1) *Average length of school term at various periods; (2) aggregate number of days schooling given to all pupils; (3) the same compared with the school population and the enrollment (columns 8 and 9).*

State or Territory.	Average number of days the schools were kept during the year. ^a					Aggregate number of days' schooling given in 1903-4.	Average number of days' schooling given for every child 5 to 18 years of age in 1903-4.	Average number of days attended by each pupil enrolled in 1903-4.
	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.			
1	2	3	4	5	6	7	8	9
United States.....	132.1	130.3	134.7	144.3	146.7	1,660,507,716	72.1	102.1
North Atlantic Division..	152	159.2	166.6	177.5	176.5	505,802,866	92	131.6
South Atlantic Division..	97.4	92.4	99.9	112.1	117.2	176,184,578	50	75.8
South Central Division...	91.6	79.2	88.2	99.8	107.9	223,777,095	44.7	69.2
North Central Division...	133.9	139.8	148	155.9	156	653,395,209	82.9	110.8
Western Division.....	119.2	129.2	135	141.5	147.9	101,347,968	90	106
North Atlantic Division:								
Maine.....	98	109	112	141	139	13,657,723	83.3	104.1
New Hampshire.....	70	105.3	117.7	147.65	146.55	7,133,028	77.7	108.6
Vermont.....	115.6	125.5	136	156.15	155	7,570,990	93.1	113.8
Massachusetts.....	169	177	177	189	185	72,477,635	107.6	146.7
Rhode Island.....	170	184	188	191	193	10,051,380	92.7	141.9
Connecticut.....	172.4	179	182.5	189.01	189.08	23,316,778	104.5	142.9
New York.....	176	178.5	186.5	175	177	179,960,763	96.8	138.4
New Jersey.....	178	192	192	186	182	45,209,005	87.9	128.4
Pennsylvania.....	127.2	133.4	147.6	166.6	162.7	146,425,564	82.1	122
South Atlantic Division:								
Delaware.....	132	158	166	170.1	b 170.1	b 4,303,530	b 87.9	b 116.6
Maryland.....	183	187	184	183	181.4	23,593,791	67.9	112.4
District of Columbia...	200	193	178	179	181	7,113,300	109.8	142.9
Virginia.....	93.2	112.8	118.2	120	c 122	c 27,421,818	c 45.2	c 73
West Virginia.....	76.8	90	97	106	123	19,466,472	60.9	79.8
North Carolina.....	d 50	50	59.25	70.5	d 89.2	d 28,370,506	d 42.5	d 57.7
South Carolina.....	d 100	70	69.6	88.4	94.5	20,234,230	41.3	69.3
Georgia.....	59	d 65	83.3	112	c 118	c 36,627,200	c 46.9	c 73
Florida.....			120	93	108	9,053,731	50.2	73.8
South Central Division:								
Kentucky.....	d 110	102	94	117.5	cd 90	cd 27,885,240	cd 40.3	cd 55.6
Tennessee.....	d 77	68	86	96	103	35,522,846	52.3	70.7
Alabama.....	66.5	81.3	73.5	78.3	e 102.5	e 24,600,000	e 38.4	e 67.4
Mississippi.....	110	74.5	d 86	101.2	c 123	c 28,680,525	c 51.8	c 71.1
Louisiana.....	d 65	78.8	100.6	120	c 130	c 20,253,220	c 42.5	c 97
Texas.....	d 140	71.7	100	108.2	117.24	54,157,633	48	74.9
Arkansas.....			d 75	77.5	92.8	19,685,757	42.1	58
Oklahoma.....				95.3	100	9,349,500	56.7	61.2
Indian Territory f.....					d 158	d 3,642,374	d 22.4	d 94.8
North Central Division:								
Ohio.....	165	152	166.5	165	160	98,959,200	86	118.4
Indiana.....	98.5	136	130	152	138	57,414,486	78.4	104.3
Illinois.....	146.7	150	155.4	152	160	d 125,370,113	d 87.8	d 128.1
Michigan.....	140	150	156	163.8	c 165	d 64,035,180	d 93.6	d 128.8
Wisconsin.....	155	165	158.6	g 160	h 169	d 48,722,700	d 74	d 105.8
Minnesota.....	d 83	94	128	169	159.9	43,570,066	76.9	102.8
Iowa.....	120	148	156	160	160	59,683,680	88.8	109.3
Missouri.....	90	d 104	129.4	144	148	68,953,834	71.4	94.3
North Dakota.....			113	155.7	142.3	8,315,151	75	87.3
South Dakota.....	d 75	d 96	145	i 129.1	d 138	d 10,146,945	d 77.5	d 95
Nebraska.....	72	82	140	135	139	30,300,934	94.2	108.6
Kansas.....	116	120	135	126.25	d 140	d 37,922,920	d 83.2	d 97.2
Western Division:								
Montana.....	d 89	96	142.7	107	b 107	cd 3,367,397	cd 54.5	cd 75
Wyoming.....	d 200	119	d 120	d 110	bd 110	bd 1,064,000	bd 48.1	bd 73.3
Colorado.....	92	d 132	144.4	149.8	158.4	15,066,533	103.3	112.2
New Mexico.....	d 111	111	d 67	i 96.6	85	2,514,470	39.2	63.3
Arizona.....	0	109	126	125	128	1,666,816	47.1	79
Utah.....	152	128	133	151	153	8,596,004	87	113.6
Nevada.....	142	143	140	154	158.7	822,383	91.2	112.4
Idaho.....	d 45	94	d 69.8	106	136	5,415,112	99	99.4
Washington.....	d 80	d 91	97.2	127.6	129.5	14,345,233	97.4	88.7
Oregon.....	d 90	90	118.2	116.6	158.4	11,482,254	96.5	110.5
California.....	123	146.6	157.6	166.2	166.5	37,007,766	101.7	123.8

^a Certain States report their school term in months; these months have been reduced to days by multiplying by 20 in each case.

^b In 1899-1900.

^c In 1902-3.

^d Approximately.

^e In 1901-2.

^f Returns imperfect.

^g In 1893-94.

^h In 1900-1901.

ⁱ In 1897-98.

TABLE 9.—*Number and sex of teachers—Percentage of male teachers.*

State or Territory.	Whole number of different teachers employed.			Percentage of male teachers.				
	Male.	Female.	Total.	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.
1	2	3	4	5	6	7	8	9
United States.....	113,744	341,498	455,242	41.0	42.8	34.5	29.9	25.0
North Atlantic Division..	17,283	95,873	113,156	26.2	28.8	20.0	18.4	15.3
South Atlantic Division..	18,332	34,191	52,523	63.8	62.5	49.1	40.7	34.9
South Central Division...	28,654	40,149	68,803	67.5	67.2	57.5	47.4	41.7
North Central Division...	43,678	148,606	192,284	43.2	41.7	32.4	28.3	22.7
Western Division.....	5,797	22,679	28,476	45.0	40.3	31.1	24.7	20.4
North Atlantic Division:								
Maine.....	791	5,902	6,693	a 24.4	a 27.2	a 16.0	a 16.4	11.8
New Hampshire.....	194	2,201	2,395	15.0	16.8	9.8	8.9	8.1
Vermont.....	324	2,986	3,310	16.5	16.8	12.0	13.6	9.8
Massachusetts.....	1,247	13,494	14,741	12.7	13.2	9.8	8.8	8.7
Rhode Island.....	177	1,878	2,055	a 20.4	20.2	12.6	9.5	8.6
Connecticut.....	341	4,169	4,510	a 22.1	a 22.8	a 13.4	a 9.0	7.5
New York.....	4,901	33,632	38,533	22.9	26.0	16.9	14.9	12.7
New Jersey.....	1,052	7,642	8,694	32.5	28.5	18.4	12.9	12.1
Pennsylvania.....	8,256	23,969	32,225	42.8	45.5	34.2	32.0	25.6
South Atlantic Division:								
Delaware.....	b 210	b 621	b 831	a 29.9	a 46.6	a 31.0	25.3	b 25.3
Maryland.....	924	4,183	5,107	45.0	42.6	27.8	21.7	18.1
District of Columbia...	176	1,425	1,601	8.2	7.8	13.0	13.1	12.4
Virginia.....	c 2,377	c 6,667	c 9,044	64.5	61.8	41.5	31.5	c 26.3
West Virginia.....	3,720	7,597	7,597	79.0	75.2	63.4	57.9	49.7
North Carolina.....	3,838	5,598	9,436	a 73.2	a 71.3	59.1	49.4	40.7
South Carolina.....	a 2,526	a 3,260	5,816	62.4	59.5	49.6	a 43.5	a 43.4
Georgia.....	c 3,630	c 6,712	c 10,342	71.4	a 65.2	53.3	44.0	c 35.1
Florida.....	931	1,994	2,925	a 65.7	61.6	48.0	36.9	31.8
South Central Division:								
Kentucky.....	a c 4,513	a c 5,936	a c 10,449	a 66.0	64.6	49.8	45.5	a c 43.2
Tennessee.....	4,220	5,393	9,613	a 75.0	74.4	61.8	a 54.0	43.9
Alabama.....	d 3,103	d 6,303	d 6,303	66.8	63.8	62.9	54.0	d 49.2
Mississippi.....	c 3,028	c 5,894	c 8,922	a 60.8	61.2	49.6	44.2	c 33.9
Louisiana.....	c 1,339	c 3,479	c 4,818	50.9	46.1	44.7	47.9	c 27.8
Texas.....	6,613	9,746	16,359	a 77.3	a 75.0	61.1	48.9	40.4
Arkansas.....	4,162	3,600	7,762	a 75.6	78.4	68.5	59.7	53.6
Oklahoma.....	1,356	2,315	3,671				42.8	36.9
Indian Territory.....	a f 320	a f 586	a f 906					a 35.3
North Central Division:								
Ohio.....	9,094	17,458	26,552	43.2	47.8	43.1	40.4	34.2
Indiana.....	6,585	9,671	16,256	60.5	57.5	51.1	46.2	40.5
Illinois.....	6,248	21,223	27,471	43.5	39.7	32.5	26.4	22.7
Michigan.....	2,684	14,081	16,765	26.3	29.2	22.3	20.3	16.0
Wisconsin.....	1,947	11,722	13,669	a 28.8	28.9	19.8	18.4	14.2
Minnesota.....	1,867	11,216	13,083	33.7	35.9	23.9	19.4	14.3
Iowa.....	3,606	26,019	29,625	39.0	33.6	20.6	17.2	12.2
Missouri.....	5,210	11,826	17,036	65.3	58.1	44.4	37.6	30.6
North Dakota.....	1,245	4,113	5,358	a 24.7	a 40.8	28.3	28.8	23.2
South Dakota.....	946	4,079	5,025			29.0	24.4	18.8
Nebraska.....	1,389	8,325	9,714			27.1	21.8	14.3
Kansas.....	a 2,857	a 8,873	a 11,730	47.2	45.1	40.8	32.7	a 24.4
Western Division:								
Montana.....	c 216	c 1,052	c 1,268	a 60.3	38.5	22.9	16.6	c 17.0
Wyoming.....	b 89	b 481	b 570	a 28.6	44.3	22.4	15.6	b 15.6
Colorado.....	738	3,550	4,288	48.8	36.4	26.2	20.9	17.2
New Mexico.....	412	440	852	a 91.7	78.0	a 62.2	a 55.2	48.4
Arizona.....	110	409	519		47.5	38.8	27.3	21.2
Utah.....	553	1,165	1,718	55.0	54.5	46.6	36.5	32.2
Nevada.....	39	318	357	32.4	46.7	16.3	11.1	10.9
Idaho.....	366	1,065	1,431	a 64.3	57.4	a 33.4	31.2	25.6
Washington.....	1,131	3,644	4,775	a 46.5	37.4	40.6	28.9	23.7
Oregon.....	847	3,199	4,046	a 51.7	48.3	43.3	28.4	20.9
California.....	1,296	7,356	8,652	40.0	33.6	21.4	17.8	15.0

a Approximately.

b In 1899-1900.

c In 1902-3.

d In 1901-2.

e Returns imperfect.

f Includes some employees.

TABLE 10.—*Teachers' wages—Number of schoolhouses—Value of school property—Private school enrollment.*

State or Territory.	Average monthly salaries of teachers.		Number of buildings used as schoolhouses. ^a	Estimated value of all public school property.	Private schools.*		
	Males.	Females.			Number of pupils enrolled.	Total public and private enrollment.	Per cent of pupils in private schools.
1	2	3	4	5	6	7	8
United States.....	<i>b</i> \$50.96	<i>b</i> \$41.54	257,627	\$685,101,343	1,313,000	17,569,038	7.47
North Atlantic Division..	<i>b</i> 67.55	<i>b</i> 43.57	42,888	279,218,286	482,800	4,326,708	11.16
South Atlantic Division..	<i>b</i> 32.12	<i>b</i> 29.51	38,261	28,615,462	121,600	2,446,506	4.97
South Central Division...	<i>b</i> 43.51	<i>b</i> 35.77	54,063	38,382,145	142,700	3,377,821	4.22
North Central Division...	54.54	42.30	107,339	278,382,058	498,700	6,394,331	7.80
Western Division.....	70.98	56.42	15,076	60,503,392	67,200	1,023,672	6.56
North Atlantic Division:							
Maine.....	38.51	28.40	3,924	5,435,916	.....	.....	.....
New Hampshire.....	<i>c</i> 45.87	<i>c</i> 29.78	1,729	4,127,957	12,072	77,745	15.53
Vermont.....	47.36	30.04	2,223	3,034,187	7,226	73,761	9.80
Massachusetts.....	145.48	55.37	<i>d e</i> 4,289	<i>d</i> 49,934,764	88,446	582,488	15.18
Rhode Island.....	122.28	52.23	537	6,011,012	19,186	90,029	21.31
Connecticut.....	106.63	45.78	1,591	13,259,923	30,104	193,245	15.58
New York.....	.....	.....	11,936	107,553,134	213,105	1,513,170	14.08
New Jersey.....	107.02	54.46	1,958	19,861,393	<i>f</i> 47,453	<i>f</i> 370,028	<i>f</i> 12.83
Pennsylvania.....	51.96	39.14	14,701	70,000,000	48,704	1,248,934	3.90
South Atlantic Division:							
Delaware.....	<i>g h</i> 36.60	<i>g h</i> 34.08	<i>f</i> 550	<i>f</i> 1,043,997	.....	.....	.....
Maryland.....	.....	.....	<i>e</i> 2,362	<i>h i</i> 4,790,000	<i>i</i> 6,000	55,789	<i>i</i> 10.75
District of Columbia..	<i>j</i> 94.48	<i>j</i> 64.31	142	<i>k</i> 5,594,827	.....	55,789	<i>l</i> 10.75
Virginia.....	<i>d</i> 34.56	<i>d</i> 27.20	<i>d</i> 7,412	<i>d</i> 3,907,664	<i>d</i> 15,500	<i>d</i> 291,100	<i>d</i> 13.96
West Virginia.....	.....	.....	6,200	4,806,408	<i>m</i> 1,894	<i>m</i> 220,709	<i>m</i> 8.86
North Carolina.....	28.55	25.38	7,212	2,927,071	<i>n</i> 26,198	<i>n</i> 361,556	<i>n</i> 7.25
South Carolina.....	<i>j</i> 25.96	<i>j</i> 23.20	4,889	<i>h</i> 2,000,000	.....	.....	.....
Georgia.....	.....	.....	<i>d</i> 7,082	<i>d</i> 2,256,403	<i>o</i> 27,285	<i>o</i> 442,932	<i>o</i> 6.16
Florida.....	44.03	35.93	2,412	1,290,052	<i>p</i> 2,000	<i>p</i> 114,384	<i>p</i> 1.75
South Central Division:							
Kentucky.....	<i>p</i> 50.90	<i>p</i> 39.18	<i>d</i> 8,561	<i>h</i> 6,117,962	<i>d</i> 17,480	<i>d</i> 518,962	<i>d</i> 3.37
Tennessee.....	39.00	34.00	6,910	4,922,531	27,007	529,337	5.10
Alabama.....	<i>f</i> 31.00	<i>f</i> 27.00	<i>e g</i> 7,058	<i>p</i> 2,200,000	<i>r</i> 26,722	<i>r</i> 388,722	<i>r</i> 6.87
Mississippi.....	<i>d</i> 33.54	<i>d</i> 29.46	<i>d</i> 7,249	<i>d</i> 2,190,000	<i>d</i> 7,500	<i>d</i> 411,147	<i>d</i> 1.82
Louisiana.....	<i>d</i> 36.25	<i>d</i> 31.43	<i>d</i> 3,433	<i>d</i> 12,680,000	<i>d</i> 14,497	<i>d</i> 223,234	<i>d</i> 6.49
Texas.....	55.24	43.27	<i>s</i> 11,458	14,590,675	.....	.....	.....
Arkansas.....	<i>t</i> 38.21	<i>t</i> 33.27	5,533	3,355,292	7,864	347,406	2.26
Oklahoma.....	44.00	38.00	3,261	<i>u</i> 2,123,000	.....	.....	.....
Indian Territory.....	.....	.....	<i>e h</i> 600	<i>w</i> 202,685	<i>x</i> 2,833	41,255	<i>x</i> 6.87
North Central Division:							
Ohio.....	<i>d</i> 45.00	<i>d</i> 40.00	13,079	51,062,804	23,569	859,176	2.74
Indiana.....	56.84	50.64	9,845	27,030,319	<i>i</i> 4,500	<i>i</i> 561,231	<i>i</i> 1.80
Illinois.....	67.33	57.95	12,907	61,783,578	147,875	1,126,429	13.13
Michigan.....	57.33	40.55	8,293	25,514,662	55,065	552,364	9.97
Wisconsin.....	<i>y</i> 55.50	<i>y</i> 35.26	7,453	<i>t</i> 16,574,795	53,113	514,327	10.23
Minnesota.....	58.30	40.56	8,061	20,761,499	<i>z</i> 20,073	<i>z</i> 372,165	<i>z</i> 5.19
Iowa.....	48.24	35.51	13,956	22,666,498	50,524	596,474	8.47
Missouri.....	44.05	43.11	10,586	24,767,525	70,308	801,718	8.77
North Dakota.....	47.87	40.90	3,495	3,757,253	.....	.....	.....
South Dakota.....	<i>p</i> 40.03	<i>p</i> 33.52	4,031	4,244,816	<i>m</i> 1,888	<i>m</i> 89,914	<i>m</i> 2.10
Nebraska.....	55.24	41.40	6,767	10,919,922	.....	.....	.....
Kansas.....	<i>aa</i> 46.00	<i>aa</i> 39.00	8,866	9,298,387	.....	.....	.....
Western Division:							
Montana.....	<i>d</i> 76.89	<i>d</i> 52.04	<i>d</i> 734	<i>d</i> 4,832,014	<i>d</i> 1,839	<i>d</i> 46,720	<i>d</i> 3.94
Wyoming.....	<i>f</i> 73.68	<i>f</i> 43.36	<i>f</i> 524	<i>f</i> 453,607	<i>z</i> 175	<i>z</i> 11,428	<i>z</i> 1.53
Colorado.....	73.47	55.69	1,946	10,265,046	2,889	137,149	2.11
New Mexico.....	<i>p</i> 64.77	<i>p</i> 64.77	<i>e</i> 729	830,165	5,366	45,070	11.91
Arizona.....	81.05	69.59	<i>e</i> 498	882,790	1,678	22,766	7.37
Utah.....	77.43	54.39	693	3,537,772	<i>i</i> 2,814	<i>i</i> 79,345	<i>i</i> 3.55
Nevada.....	103.47	63.39	<i>e</i> 328	269,965	323	7,642	4.23
Idaho.....	67.07	52.84	974	1,798,456	.....	.....	.....
Washington.....	60.24	49.70	2,506	8,732,996	5,143	166,794	3.08
Oregon.....	54.22	42.05	2,190	4,390,838	5,781	109,658	5.27
California.....	<i>p</i> 87.01	<i>p</i> 67.19	3,954	24,509,743	<i>bb</i> 37,226	336,264	<i>bb</i> 11.07

*The reports of private schools are more or less incomplete, and the number of pupils as given may be taken to represent the minimum number of private pupils in the States furnishing this item. In forming the totals the States not reporting are estimated. ^a Including buildings rented. ^b Average for those States reporting salaries. ^c High-school teachers' wages not included. ^d In 1902-3. ^e Number of schools. ^f In 1899-1900. ^g In 1889-90. ^h Approximately. ⁱ In 1900-1901. ^j In 1897-98. ^k Total cost of sites and buildings. ^l Estimated. ^m In 1893-94. ⁿ In 1891-92. ^o In 1892-93. ^p In 1901-2. ^q In 1896-97. ^r In 1898-99. ^s Does not include 381 independent districts. ^t Excluding the wages of teachers holding State certificates. ^u Statistics incomplete. ^v Returns imperfect. ^w "Public-school" property only. ^x Includes some college students. ^y Outside of cities. ^z In 1894-95. ^{aa} Does not include cities of the first and second class. ^{bb} Includes only pupils of school census age (5-17.).

TABLE 11.—(1) *Length of school term.* (2) *The aggregate number of days' schooling given compared with the school population.*

Year.	Average length of school term, in days.						Average number of days' schooling given for every child 5 to 18 years of age.					
	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71.....	132.1	152.0	97.4	91. ^a	133.9	119.2	48.7	70.2	18.1	21.8	59.6	45.9
1871-72.....	133.4	151.9	103.4	97.7	136.1	121.8	49.5	68.9	20.3	25.8	59.8	46.0
1872-73.....	129.1	154.6	97.4	89.1	129.6	118.3	47.8	67.9	21.7	23.4	56.8	45.0
1873-74.....	128.8	154.8	95.6	81.1	132.6	119.0	49.6	70.4	24.5	21.9	59.8	46.1
1874-75.....	130.4	158.7	95.2	81.0	134.6	132.5	51.0	72.9	26.1	23.5	60.2	53.6
1875-76.....	133.1	158.0	95.6	82.5	139.1	130.3	51.4	73.7	26.8	20.1	62.2	54.4
1876-77.....	132.1	157.2	91.4	80.3	139.8	130.1	51.1	73.6	26.3	19.8	62.3	54.3
1877-78.....	132.0	157.6	89.7	86.7	140.1	129.9	53.2	75.6	26.8	24.3	64.3	54.5
1878-79.....	130.2	160.1	88.6	81.9	136.4	132.0	52.0	75.0	25.7	23.9	62.3	56.7
1879-80.....	130.3	159.2	92.4	79.2	139.8	129.2	53.1	74.5	29.3	24.2	64.4	54.9
1880-81.....	130.1	158.7	92.4	82.1	138.8	133.8	52.0	72.2	28.5	25.0	62.7	56.9
1881-82.....	131.2	160.6	95.9	82.5	137.1	136.2	52.9	73.3	30.6	25.6	63.2	58.0
1882-83.....	129.8	161.0	95.9	82.5	137.1	132.6	53.8	74.4	32.0	26.8	63.9	57.3
1883-84.....	129.1	156.0	95.6	85.9	138.6	133.8	55.5	72.5	32.7	30.0	67.7	61.6
1884-85.....	130.7	163.1	93.4	87.5	139.1	131.8	56.8	77.2	33.7	31.4	67.3	58.3
1885-86.....	130.4	161.6	93.4	86.9	140.4	130.8	57.3	76.7	33.7	32.0	68.7	59.6
1886-87.....	131.3	165.9	95.3	87.5	139.5	131.6	57.7	77.8	34.8	32.1	68.7	59.1
1887-88.....	132.3	164.4	95.7	87.6	144.0	130.7	58.7	76.8	35.5	33.6	71.3	57.3
1888-89.....	133.7	164.1	95.0	88.9	147.5	135.7	58.9	76.7	35.4	34.0	71.6	61.7
1889-90.....	134.7	166.6	99.9	88.2	148.0	135.0	59.2	76.8	37.3	33.9	71.9	61.2
1890-91.....	135.7	168.1	103.8	92.0	145.8	136.9	60.7	78.1	38.1	35.8	73.2	65.9
1891-92.....	136.9	169.1	105.3	94.1	146.8	139.1	61.5	78.3	38.2	37.7	73.6	71.1
1892-93.....	136.3	169.6	103.4	93.0	146.6	138.8	62.3	78.7	39.2	37.5	75.1	70.8
1893-94.....	139.5	172.3	108.3	97.5	150.2	137.1	65.9	82.2	42.4	41.3	79.1	72.4
1894-95.....	139.5	172.8	106.5	92.8	150.8	142.4	66.9	84.8	42.0	39.0	81.0	77.6
1895-96.....	140.5	175.5	107.8	92.2	151.9	142.0	68.1	86.8	42.1	39.8	82.3	78.7
1896-97.....	142.0	173.3	110.9	96.3	152.8	148.6	69.7	88.9	43.0	42.3	83.1	82.5
1897-98.....	143.0	174.3	113.8	97.4	152.8	151.7	71.2	90.4	46.9	42.5	84.8	82.1
1898-99.....	143.0	174.0	112.3	98.4	154.5	141.6	70.0	90.0	43.6	43.3	83.3	76.3
1899-1900.....	144.3	177.5	112.1	99.8	155.9	141.5	71.8	91.0	45.4	44.8	85.7	76.7
1900-1901.....	143.7	177.1	113.2	98.2	155.6	140.3	70.3	90.4	47.7	42.1	83.0	77.0
1901-2.....	144.7	177.4	115.0	101.2	155.1	144.3	71.9	91.7	48.5	43.8	84.7	82.4
1902-3 ^a	147.2	178.5	118.0	105.6	156.9	146.3	71.8	92.3	49.0	43.9	83.6	85.3
1903-4 ^a	146.7	176.5	117.2	107.9	156.0	147.9	72.1	92.0	50.0	44.7	82.9	90.0

^a Subject to correction.

TABLE 12.—School moneys received.

State or Territory.	Income of permanent school funds and rent of school lands.	From taxation.			From other sources, State and local.	Total revenue (excluding balances on hand and proceeds of bond sales).
		From State taxes.	From local taxes.	Total from taxation.		
1	2	3	4	5	6	7
United States.....	\$10,193,093	\$42,552,969	\$193,215,794	\$235,768,763	\$33,172,139	\$279,133,995
North Atlantic Division.....	780,708	14,030,160	78,439,500	92,469,660	19,248,540	112,498,908
South Atlantic Division.....	308,830	5,235,716	8,285,395	13,521,111	1,955,250	15,785,191
South Central Division.....	1,920,963	7,657,635	8,036,705	15,694,340	2,118,093	19,733,396
North Central Division.....	6,226,415	9,132,171	84,146,403	93,298,574	8,289,330	107,814,319
Western Division.....	956,177	6,477,287	14,307,791	20,785,078	1,560,926	23,302,181
North Atlantic Division:						
Maine.....	60,540	577,333	1,584,963	2,162,296	0	2,222,836
New Hampshire.....	20,071	62,032	1,069,241	1,131,273	80,411	1,231,755
Vermont.....	71,888	138,317	886,018	1,024,335	a 64,763	1,160,986
Massachusetts.....	183,694	b 133,225	15,854,800	15,988,025	264,949	16,436,668
Rhode Island.....	15,086	139,888	1,478,880	1,618,768	84,842	1,718,696
Connecticut.....	144,874	399,131	2,894,412	3,293,543	334,632	3,773,499
New York.....	52,611	4,259,776	30,695,329	34,955,105	c 12,635,064	47,642,080
New Jersey.....	231,944	2,874,283	6,026,677	8,900,960	9,314	9,142,218
Pennsylvania.....	0	5,446,175	17,949,180	23,395,355	5,774,565	29,169,920
South Atlantic Division:						
Delaware (1899-1900).....	d 117,379	89,432	175,735	265,167	25,030	267,576
Maryland.....	42,981	712,112	1,801,602	2,513,714	271,309	2,828,004
District of Columbia.....	0	0	e 1,576,354	1,576,354	0	1,576,354
Virginia (1902-3).....	54,220	1,008,761	1,008,542	2,017,303	65,367	2,136,890
West Virginia.....	63,463	422,015	1,821,894	2,243,909	241,071	2,548,443
North Carolina.....	0	1,254,814	377,481	1,632,295	308,148	1,940,443
South Carolina.....	0	f 779,754	200,868	980,622	g 280,330	1,260,952
Georgia (1902-3).....	(h)	800,000	593,257	1,393,257	747,132	2,140,389
Florida.....	30,787	168,828	729,662	898,490	16,863	946,140
South Central Division:						
Kentucky (1902-3).....	(h)	1,695,575	882,713	2,578,288	144,851	2,723,139
Tennessee.....	136,030	271,614	1,828,002	2,099,616	505,887	2,741,533
Alabama.....	155,882	831,210	115,155	946,365	150,000	1,252,247
Mississippi (1902-3).....	187,746	/ 1,250,000	296,668	1,546,668	124,576	1,858,990
Louisiana (1902-3).....	79,293	469,544	/ 890,372	1,359,916	127,003	1,566,217
Texas.....	1,362,012	2,362,430	1,441,960	3,804,390	898,622	6,065,024
Arkansas.....	0	542,685	/ 1,240,648	1,783,333	47,040	1,830,373
Oklahoma.....	(j)	234,377	886,584	1,121,161	k 106,628	1,227,789
Indian Territory.....	0	0	l 454,003	454,003	13,481	468,084
North Central Division:						
Ohio.....	246,455	1,858,228	14,707,114	16,565,342	1,027,005	17,838,802
Indiana.....	625,851	1,698,869	6,698,362	8,397,231	611,609	9,634,691
Illinois.....	840,259	925,067	18,349,638	19,274,705	769,453	20,884,417
Michigan (1902-3).....	352,798	1,572,163	6,229,280	7,801,443	717,054	8,871,295
Wisconsin.....	210,420	1,231,695	5,542,037	6,773,732	1,035,078	8,019,230
Minnesota.....	1,344,155	617,450	5,288,289	5,905,739	c 1,034,182	8,284,076
Iowa.....	m 214,525	0	n 9,316,776	9,316,776	1,104,708	10,636,069
Missouri.....	732,152	1,046,037	6,853,512	7,899,549	572,154	9,203,855
North Dakota.....	317,020	0	1,624,337	1,624,337	146,458	2,087,815
South Dakota.....	n 420,472	0	1,662,195	1,662,195	102,841	2,185,508
Nebraska.....	496,109	202,662	3,252,332	3,454,994	978,154	4,929,257
Kansas.....	o 426,199	0	4,622,531	4,622,531	190,574	5,239,304
Western Division:						
Montana (1902-3).....	p 114,727	493,236	585,069	1,078,305	84,710	1,277,742
Wyoming (1899-1900).....	43,265	0	223,266	223,266	25,223	291,754
Colorado.....	182,321	0	3,560,287	3,560,287	429,886	4,172,494
New Mexico.....	(q)	r 214,644	(j)	214,644	/ 102,246	316,890
Arizona.....	0	32,439	284,182	316,621	84,900	401,521
Utah.....	(j)	403,762	1,126,079	1,529,841	124,885	1,654,726
Nevada.....	126,303	14,019	97,314	111,333	33,139	270,775
Idaho.....	(s)	t 71,821	619,482	691,303	119,414	810,717
Washington.....	(j)	u 1,632,210	1,759,252	3,391,462	183,417	3,574,879
Oregon.....	241,234	0	1,407,892	1,407,892	122,975	1,772,101
California.....	248,327	v 3,615,156	4,444,968	8,260,124	250,131	8,758,582

a Includes money borrowed.

b State contribution to high school instruction and cost of supervision.

c Includes receipts from sale of bonds.

d May include some State taxes.

e Includes United States appropriation.

f Includes poll tax.

g Includes "dispensary funds."

h Not reported separately.

i Approximately.

j Included in State taxes.

k Includes some unclassified receipts.

l Returns imperfect.

m In 1902-3.

n Includes fines, etc.

o Includes some receipts from "other sources."

p Includes proceeds of school land sales.

q Included, if any, in State taxes.

r Includes local taxes and income from permanent fund.

s Included in State apportionment.

t State apportionment.

u Includes interest on the permanent fund.

v Includes taxes on railroads and collateral inheritances.

TABLE 13.—*The school revenue compared with the school population and the adult male population (21 years and upward); percentage analysis of the school revenue.*

State or Territory.	Amount raised for each person 5 to 18 years of age.	Amount raised per adult male.	Amount each adult male must contribute to provide \$1 for each person 5-18 years.	Per cent of the whole revenue derived from—			
				Permanent funds and rents.	State taxes.	Local taxes.	Other sources.
1	2	3	4	5	6	7	8
United States.....	\$12.12	\$12.35	\$1.02	3.65	15.25	69.22	11.88
North Atlantic Division.....	20.46	16.79	.82	.70	12.47	69.72	17.11
South Atlantic Division.....	4.48	5.96	1.33	1.96	33.17	52.48	12.39
South Central Division.....	3.94	5.39	1.37	9.73	38.81	40.73	10.73
North Central Division.....	13.68	13.47	.98	5.77	8.49	78.05	7.69
Western Division.....	20.70	14.66	.71	4.10	27.80	61.40	6.70
North Atlantic Division:							
Maine.....	13.55	10.01	.74	2.72	25.97	71.31	0.00
New Hampshire.....	13.41	9.09	.68	1.63	5.03	86.81	6.53
Vermont.....	14.27	10.58	.74	6.19	11.91	76.32	a 5.58
Massachusetts.....	24.40	18.02	.74	1.12	b 8.1	96.46	1.61
Rhode Island.....	15.85	12.55	.79	.88	8.14	86.05	4.93
Connecticut.....	16.90	12.56	.74	3.84	10.58	76.71	8.87
New York.....	25.62	20.38	.80	.11	8.94	64.43	c 26.52
New Jersey.....	17.77	15.06	.85	2.54	31.44	65.92	d 10
Pennsylvania.....	16.26	15.05	.92	0.00	18.67	61.53	19.80
South Atlantic Division:							
Delaware (1899-1900).....	8.32	7.55	.91	d 28.80	21.94	43.12	6.14
Maryland.....	8.14	8.39	1.03	1.52	25.18	63.71	9.59
District of Columbia.....	24.34	17.59	.72	0.00	0.00	e 100.00	0.00
Virginia (1902-3).....	3.52	4.61	1.31	2.54	47.20	47.20	3.06
West Virginia.....	7.97	9.49	1.19	2.49	16.56	71.49	9.46
North Carolina.....	2.91	4.39	1.51	0.00	64.67	19.45	15.88
South Carolina.....	2.57	4.21	1.64	0.00	f 61.84	15.93	g 22.23
Georgia (1902-3).....	2.74	4.05	1.48	(h)	37.38	27.72	34.90
Florida.....	5.20	6.14	1.17	3.25	17.85	77.12	1.78
South Central Division:							
Kentucky (1902-3).....	3.94	4.81	1.22	(h)	62.26	32.42	5.32
Tennessee.....	4.04	5.55	1.33	4.96	9.91	66.68	18.45
Alabama.....	1.92	2.83	1.47	12.45	66.38	9.20	11.97
Mississippi (1902-3).....	3.35	5.07	1.51	10.10	f 67.24	15.96	6.70
Louisiana (1902-3).....	3.29	4.54	1.38	5.06	29.98	f 56.85	8.11
Texas.....	5.37	7.43	1.38	22.46	38.95	23.77	14.82
Arkansas.....	3.91	5.52	1.41	0.00	29.65	f 67.78	2.57
Oklahoma.....	7.45	8.51	1.14	(j)	19.11	72.21	k 8.68
Indian Territory.....	2.88	3.95	1.37	0.00	0.00	k 97.12	2.88
North Central Division:							
Ohio.....	15.50	14.06	.91	1.38	10.42	82.44	5.76
Indiana.....	13.16	12.71	.97	6.50	17.63	69.52	6.35
Illinois.....	14.62	13.76	.94	4.02	4.43	87.87	3.68
Michigan (1902-3).....	13.04	11.84	.91	3.98	17.72	70.22	8.08
Wisconsin.....	12.18	13.09	1.08	2.62	15.36	69.11	12.91
Minnesota.....	14.63	14.85	1.02	16.23	7.45	63.84	c 12.48
Iowa.....	15.82	15.83	1.00	m 2.02	0.00	i 87.60	10.38
Missouri.....	9.53	10.18	1.07	7.95	11.37	74.46	6.22
North Dakota.....	18.83	18.89	1.00	15.19	0.00	77.80	7.01
South Dakota.....	16.70	18.44	1.10	n 19.24	0.00	76.06	4.70
Nebraska.....	15.32	16.38	1.07	10.06	4.11	65.98	19.85
Kansas.....	11.49	12.12	1.06	o 8.14	0.00	88.23	3.63
Western Division:							
Montana (1902-3).....	20.68	10.99	.53	p 8.98	38.60	45.79	6.63
Wyoming (1899-1900).....	13.20	7.70	.58	14.83	0.00	76.53	8.64
Colorado.....	28.62	20.54	.72	4.37	0.00	85.33	10.30
New Mexico.....	4.94	5.37	1.09	(q)	r 67.74	(j)	f 32.26
Arizona.....	11.35	8.19	.72	0.00	8.08	70.78	21.14
Utah.....	16.76	22.49	1.34	(j)	24.40	68.05	7.55
Nevada.....	30.04	15.29	.51	46.64	5.18	35.94	12.24
Idaho.....	14.82	12.73	.86	(e)	t 8.86	76.41	14.73
Washington.....	24.27	16.26	.67	(j)	u 45.66	49.21	5.13
Oregon.....	14.89	11.22	.75	13.61	0.00	79.45	6.94
California.....	24.07	15.00	.62	2.83	v 41.28	53.03	2.86

a Includes money borrowed. b State contribution to high school instruction and cost of supervision. c Includes receipts from sale of bonds. d May include some State taxes. e Includes United States appropriation. f Includes poll tax. g Includes "Dispensary fund." h Not reported separately. i Approximately. j Included in State taxes. k Includes some unclassified receipts. l Returns imperfect. m In 1902-3. n Includes fines, etc. o Includes some receipts from "Other sources." p Includes proceeds of school land sales. q Included, if any, in State taxes. r Includes local taxes and income from permanent funds. s Included in State apportionment. t State apportionment. u Includes interest on the permanent fund. v Includes taxes on railroads and on collateral inheritances.

TABLE 14.—*Progress of school expenditure.*

State or Territory.	Total amount expended for schools.					Expended per capita of total population.				
	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.	1870-71.	1879-80.	1889-90.	1899-1900.	1903-4.
1	2	3	4	5	6	7	8	9	10	11
United States	\$69,107,612	\$78,094,687	\$140,506,715	\$214,964,618	\$273,216,227	\$1.75	\$1.56	\$2.24	\$2.84	\$3.36
N. Atlantic Div.	29,796,835	28,538,058	48,023,492	83,910,564	105,332,839	2.38	1.97	2.76	3.99	4.68
S. Atlantic Div.	3,781,581	5,130,492	8,767,165	12,921,797	15,907,956	.63	.68	.99	1.24	1.44
S. Central Div.	4,854,834	4,872,829	10,678,680	14,753,816	19,870,733	.73	.55	.97	1.08	1.30
N. Central Div.	28,430,033	35,285,635	62,823,563	86,165,827	107,663,687	2.14	2.03	2.81	3.27	3.85
Western Div.	2,244,329	4,267,673	10,213,815	17,212,614	24,441,012	2.15	2.41	3.37	4.21	5.44
N. Atlantic Div.:										
Maine.....	950,662	1,067,991	1,327,553	1,712,795	2,080,109	1.51	1.65	2.01	2.47	2.94
New Hampshire.....	418,545	565,339	844,333	1,052,202	1,376,899	1.30	1.63	2.24	2.56	3.24
Vermont.....	499,961	446,217	711,072	1,074,222	1,176,784	1.51	1.34	2.14	3.13	3.38
Massachusetts.....	5,579,363	4,983,900	8,286,062	13,826,242	16,436,668	3.73	2.80	3.70	4.93	5.42
Rhode Island.....	461,160	526,112	884,966	1,548,675	1,804,762	2.05	1.90	2.56	3.61	3.91
Connecticut.....	1,496,981	1,408,375	2,157,014	3,189,249	3,795,260	2.74	2.26	2.89	3.51	3.90
New York.....	9,607,904	10,296,977	17,543,880	33,421,491	43,750,277	2.17	2.03	2.92	4.60	5.63
New Jersey.....	2,302,341	1,873,465	3,340,190	6,608,692	8,838,515	2.48	1.66	2.31	3.51	4.29
Pennsylvania.....	8,479,918	7,369,682	12,928,422	21,476,995	26,073,565	2.36	1.72	2.46	3.41	3.88
S. Atlantic Div.:										
Delaware.....	153,509	207,281	<i>a</i> 275,000	453,670	<i>b</i> 453,670	1.21	1.41	<i>a</i> 1.63	2.46	<i>b</i> 2.46
Maryland.....	1,214,729	1,544,267	1,910,663	2,803,032	2,755,288	1.53	1.65	1.83	2.36	2.21
District of Columbia.....	373,535	438,567	905,777	1,076,620	1,576,354	2.77	2.47	3.93	3.86	5.28
Virginia.....	587,472	946,109	1,604,509	1,989,238	<i>c</i> 2,137,265	.47	.63	.97	1.07	<i>c</i> 1.11
W. Virginia.....	577,719	707,553	1,198,493	2,009,123	2,531,655	1.26	1.14	1.57	2.10	2.44
North Carolina.....	177,498	376,062	714,900	950,317	2,075,566	.16	.27	.44	.50	1.04
South Carolina.....	275,688	324,629	450,926	894,004	1,191,963	.38	.33	.39	.67	.84
Georgia.....	292,000	471,029	1,190,354	1,980,016	<i>c</i> 2,240,247	.24	.31	.65	.89	<i>c</i> .96
Florida.....	129,431	114,895	516,533	765,777	945,848	.66	.43	1.32	1.45	1.62
S. Central Div.:										
Kentucky.....	<i>a</i> 1,075,000	1,069,030	2,140,678	3,037,908	<i>a</i> <i>c</i> 2,662,863	<i>a</i> .80	.65	1.15	1.41	<i>c</i> 1.19
Tennessee.....	<i>a</i> 758,000	744,180	1,526,241	1,751,407	2,602,141	<i>a</i> .59	.48	.86	.87	1.23
Alabama.....	<i>a</i> 370,000	<i>a</i> 500,000	<i>a</i> 890,000	925,464	1,252,247	<i>a</i> .56	.40	.59	.50	.64
Mississippi.....	950,000	830,705	1,109,575	1,385,112	<i>c</i> 1,868,544	1.11	.73	.86	.89	<i>c</i> 1.05
Louisiana.....	531,834	411,858	817,110	1,135,125	<i>c</i> 1,551,232	.71	.44	.73	.82	<i>c</i> 1.06
Texas.....	<i>a</i> 650,000	<i>a</i> 1,030,000	3,178,300	4,465,255	6,200,587	<i>a</i> .74	.65	1.42	1.46	1.84
Arkansas.....	<i>a</i> 520,000	287,056	1,016,776	1,369,810	1,729,879	<i>a</i> 1.02	.36	.90	1.04	1.25
Oklahoma.....				686,095	1,359,624				1.72	2.58
Ind. Terr.....					643,616					1.35
N. Central Div.:										
Ohio.....	6,831,035	7,166,963	10,602,238	13,335,211	15,802,002	2.52	2.24	2.89	3.21	3.63
Indiana.....	<i>a</i> 2,897,537	4,491,850	5,245,218	8,182,526	9,563,450	<i>a</i> 1.70	2.27	2.39	3.25	3.54
Illinois.....	6,656,542	7,014,092	11,645,126	17,757,145	21,792,751	2.57	2.28	3.04	3.68	4.18
Michigan.....	2,840,740	2,775,917	5,349,366	7,297,691	9,158,014	2.33	1.70	2.55	3.01	3.62
Wisconsin.....	1,932,539	2,177,023	3,801,212	5,493,370	7,885,050	1.70	1.65	2.25	2.65	3.55
Minnesota.....	960,558	1,328,429	4,187,310	5,630,013	8,073,323	2.06	1.70	3.22	3.21	4.14
Iowa.....	3,269,190	4,484,043	6,382,953	8,496,522	10,696,693	2.70	2.76	3.34	3.81	4.53
Missouri.....	1,749,049	2,675,364	5,434,262	7,816,050	9,878,198	.99	1.23	2.03	2.52	3.01
N. Dakota.....	<i>a</i> 23,000	245,000	1,199,630	1,526,090	2,316,346	<i>a</i> 1.29	1.81	3.43	4.78	6.25
S. Dakota.....			1,605,623	2,239,135	2,239,135			4.00	5.29	
Nebraska.....	365,520	1,108,617	3,376,332	4,403,222	4,774,146	2.61	2.45	3.19	4.13	4.47
Kansas.....	904,323	1,818,337	4,972,967	4,622,364	5,684,579	2.24	1.83	3.48	3.14	3.70
W. Div.:										
Montana.....	<i>a</i> 35,600	78,730	364,084	923,310	<i>c</i> 1,226,253	<i>a</i> 1.62	2.01	2.76	3.79	<i>c</i> 4.46
Wyoming.....	<i>a</i> 7,000	28,504	<i>a</i> 225,000	253,551	<i>b</i> 253,551	<i>a</i> 1.37	<i>a</i> 3.71	2.74	<i>b</i> 2.50	<i>b</i> 2.50
Colorado.....	67,395	395,227	1,681,379	2,793,648	3,984,967	1.44	2.03	4.08	5.18	6.75
N. Mexico.....	<i>a</i> 4,900	28,973	<i>a</i> 85,000	343,429	353,012	<i>a</i> .05	.24	.55	1.76	1.69
Arizona.....	0	61,172	181,914	299,730	438,828		1.51	3.05	2.44	3.21
Utah.....	<i>a</i> 117,000	132,194	394,685	1,094,757	1,657,234	<i>a</i> 1.28	.92	1.90	3.96	5.47
Nevada.....	<i>a</i> 85,000	220,245	161,481	224,622	257,501	<i>a</i> 1.93	3.54	3.53	5.30	6.08
Idaho.....	19,003	38,411	169,020	400,043	1,001,394	1.17	1.18	2.00	2.47	5.24
Washington.....	<i>a</i> 35,000	112,615	958,111	2,375,753	4,053,468	<i>a</i> 1.30	1.50	2.74	4.59	6.96
Oregon.....	<i>a</i> 160,000	307,031	805,979	1,594,420	1,803,339	<i>a</i> 1.65	1.76	2.57	3.86	3.99
California.....	1,713,431	2,864,571	5,187,162	6,909,351	9,401,465	2.93	3.31	4.29	4.65	5.90

a Approximately.
b In 1899-1900.*c* In 1902-3.*d* Returns imperfect.

TABLE 15.—*The school expenditure of 1903-4 classified.*

State or Territory.	Paid for sites, buildings, furniture, libraries, and apparatus.	Paid for teachers' and superintendents' salaries.	Paid for all other purposes, principally maintenance.	Total expenditure, excluding payments of bonds.
1	2	3	4	5
United States.....	\$49,453,269	\$167,824,753	\$55,938,205	\$273,216,227
North Atlantic Division.....	23,842,402	58,846,270	22,644,167	105,332,839
South Atlantic Division.....	1,803,262	11,753,793	2,350,901	15,907,956
South Central Division.....	2,035,898	15,421,518	2,413,317	19,870,733
North Central Division.....	16,963,470	67,330,087	23,370,130	107,663,687
Western Division.....	4,808,237	14,473,085	5,159,690	24,441,012
North Atlantic Division:				
Maine.....	438,268	<i>a</i> 1,275,471	366,370	2,080,109
New Hampshire.....	215,121	795,990	<i>b</i> 365,788	1,376,899
Vermont.....	102,601	728,913	345,270	1,176,784
Massachusetts.....	3,252,392	9,536,660	3,647,616	16,436,668
Rhode Island.....	278,022	1,151,455	375,285	1,804,762
Connecticut.....	722,989	2,290,871	781,400	3,795,260
New York.....	12,093,296	25,155,684	6,501,297	43,750,277
New Jersey.....	1,579,176	4,933,185	2,326,110	8,838,515
Pennsylvania.....	5,160,543	12,978,041	7,934,981	26,073,563
South Atlantic Division:				
Delaware (1899-1900).....	79,306	279,556	94,808	453,670
Maryland.....	137,758	2,186,453	431,077	2,755,288
District of Columbia.....	282,958	985,685	307,711	1,576,354
Virginia (1902-3).....	206,313	1,676,777	254,275	2,137,365
West Virginia.....	370,294	1,590,429	570,932	2,531,655
North Carolina.....	272,950	1,350,163	452,453	2,075,566
South Carolina.....	110,678	1,011,944	69,341	1,191,963
Georgia (1902-3).....	234,969	1,963,397	41,881	2,240,247
Florida.....	108,036	709,389	128,423	945,848
South Central Division:				
Kentucky (1902-3) <i>c</i>	295,655	2,219,178	148,030	2,662,863
Tennessee.....	340,546	1,962,266	299,329	2,602,141
Alabama.....	(<i>d</i>)	902,509	<i>c</i> 349,738	1,252,247
Mississippi (1902-3).....	54,007	1,573,416	241,121	1,868,544
Louisiana (1902-3).....	99,625	1,255,352	196,255	1,551,232
Texas.....	620,378	4,896,305	683,904	6,200,587
Arkansas.....	166,606	1,472,652	90,621	1,729,879
Oklahoma.....	296,087	798,094	<i>e</i> 265,443	1,359,624
Indian Territory <i>f</i>	162,994	<i>e</i> 341,746	<i>e</i> 138,876	643,616
North Central Division:				
Ohio.....	1,179,179	10,557,909	4,064,914	15,802,002
Indiana.....	1,328,577	6,970,452	<i>c</i> 1,064,421	9,363,450
Illinois.....	4,143,193	12,812,511	4,837,047	21,792,751
Michigan.....	1,265,896	5,688,103	2,204,015	9,158,014
Wisconsin.....	1,365,590	4,852,159	1,667,301	7,885,050
Minnesota.....	1,656,308	4,958,947	1,458,068	8,073,323
Iowa.....	992,361	6,541,754	<i>b</i> 3,162,578	10,696,693
Missouri.....	<i>b</i> 2,525,692	5,637,694	1,714,812	9,878,198
North Dakota.....	564,039	1,176,175	576,132	2,316,346
South Dakota.....	348,999	1,365,151	524,985	2,239,135
Nebraska.....	825,914	3,105,836	842,396	4,774,146
Kansas.....	767,722	3,663,396	<i>g</i> 1,253,461	5,684,579
Western Division:				
Montana (1902-3).....	367,131	651,728	217,384	1,236,253
Wyoming (1899-1900).....	27,597	180,386	45,568	253,551
Colorado.....	587,019	2,288,749	1,109,169	3,984,967
New Mexico.....	52,693	250,123	50,196	353,012
Arizona.....	56,916	256,714	125,198	438,828
Utah.....	330,221	831,244	495,769	1,657,234
Nevada.....	36,527	95,584	<i>e</i> 125,390	257,501
Idaho.....	261,670	482,685	<i>b</i> 257,039	1,001,394
Washington.....	859,468	2,246,662	947,338	4,053,468
Oregon.....	356,196	1,161,349	285,794	1,803,339
California.....	1,872,799	6,027,851	1,500,815	9,401,465

a Includes janitors' wages.*b* Includes debt paid.*c* Approximately.*d* Not reported separately.*e* Includes some unclassified expenditures.*f* Returns imperfect.*g* Includes repairs.

TABLE 16.—(1) *Expenditure per pupil (based on average attendance)*; (2) *average daily expenditure per pupil*; (3) *percentage analysis of school expenditure*.

State or Territory.	Expenditure per capita of average attendance.				Average daily expenditure per pupil.		Per cent of total expenditure devoted to—		
	For sites, buildings, etc.	For salaries.	For all other purposes.	Total per pupil.	For salaries only.	Total.	Sites, buildings, etc.	Salaries.	All other purposes.
1	2	3	4	5	6	7	8	9	10
United States.....	\$4.37	\$14.83	\$4.94	\$24.14	<i>Cents.</i> 10.1	<i>Cents.</i> 16.5	18.1	61.4	20.5
North Atlantic Division.....	8.32	20.53	7.90	36.75	11.6	20.8	22.6	55.9	21.5
South Atlantic Division.....	1.20	7.81	1.56	10.57	6.7	9.0	11.3	73.9	14.8
South Central Division.....	.98	7.44	1.16	9.58	6.9	8.9	10.2	77.6	12.2
North Central Division.....	4.05	16.07	5.58	25.70	10.3	16.4	15.8	62.5	21.7
Western Division.....	7.01	21.12	7.53	35.66	14.3	24.1	19.7	59.2	21.1
North Atlantic Division:									
Maine.....	4.46	<i>a</i> 12.98	3.73	21.17	9.3	15.2	21.1	<i>a</i> 61.3	17.6
New Hampshire.....	4.42	16.35	<i>b</i> 7.52	28.29	11.1	19.3	15.6	57.8	<i>b</i> 26.6
Vermont.....	2.10	14.92	7.07	24.09	9.6	15.5	8.7	61.9	29.4
Massachusetts.....	8.30	24.34	9.31	41.95	13.2	22.7	19.8	58.0	22.2
Rhode Island.....	5.38	22.28	7.26	34.92	11.5	18.1	15.4	63.8	20.8
Connecticut.....	5.86	18.58	6.34	30.78	9.8	16.3	19.0	60.4	20.6
New York.....	12.55	26.10	6.75	45.40	14.0	24.3	27.6	57.5	14.9
New Jersey.....	6.59	20.60	9.71	36.90	11.3	20.3	17.9	55.8	26.3
Pennsylvania.....	5.73	14.42	8.81	28.96	8.9	17.8	19.8	49.8	30.4
South Atlantic Division:									
Delaware (1899-1900).....	<i>c</i> 3.13	<i>c</i> 11.05	<i>c</i> 3.75	<i>c</i> 17.93	<i>c</i> 6.5	<i>c</i> 10.5	17.5	61.6	20.9
Maryland.....	1.06	16.81	3.31	21.18	9.3	11.7	5.0	79.4	15.6
District of Columbia.....	7.20	25.08	7.83	40.11	13.9	22.2	17.9	62.6	19.5
Virginia (1902-3).....	.92	7.46	1.13	9.51	6.1	7.8	9.6	78.5	11.9
West Virginia.....	2.34	10.05	3.61	16.00	8.2	13.0	14.6	62.8	22.6
North Carolina.....	<i>c</i> .86	<i>c</i> 4.24	<i>c</i> 1.42	<i>c</i> 6.52	<i>c</i> 4.8	<i>c</i> 7.3	13.2	65.0	21.8
South Carolina.....	.52	4.73	.32	5.57	5.0	5.9	9.3	84.9	5.8
Georgia (1902-3).....	.76	6.33	.13	7.22	5.4	6.1	10.5	87.6	1.9
Florida.....	1.29	8.48	1.54	11.31	7.9	10.5	11.4	75.0	13.6
South Central Division:									
Kentucky (1902-3) <i>c</i>.....	.95	7.16	.48	8.59	8.0	9.5	11.1	83.3	5.6
Tennessee.....	.99	5.69	.87	7.55	5.5	7.3	13.1	75.4	11.5
Alabama.....	(<i>d</i>)	3.76	<i>c</i> 1.46	5.22	<i>c</i> 3.7	<i>c</i> 5.1	(<i>d</i>)	72.1	<i>c</i> 27.9
Mississippi (1902-3).....	.23	6.75	1.03	8.01	5.5	6.5	2.9	84.2	12.9
Louisiana (1902-3).....	.64	8.06	1.26	9.96	6.2	7.7	6.4	80.9	12.7
Texas.....	1.34	10.60	1.48	13.42	9.0	11.4	10.0	79.0	11.0
Arkansas.....	.79	6.94	.43	8.16	7.5	8.8	9.6	85.2	5.2
Oklahoma.....	3.17	8.53	<i>e</i> 2.84	14.54	8.5	14.5	21.8	58.7	<i>e</i> 19.5
Indian Territory <i>f</i>	<i>c</i> 7.07	<i>c</i> 14.83	<i>c</i> 6.02	<i>c</i> 27.92	<i>c</i> 9.4	<i>c</i> 17.7	25.3	<i>e</i> 53.1	<i>e</i> 21.6
North Central Division:									
Ohio.....	1.91	17.07	6.57	25.55	10.7	16.0	7.5	66.8	25.7
Indiana.....	3.19	16.75	<i>c</i> 2.56	22.50	12.1	16.3	14.2	74.4	<i>c</i> 11.4
Illinois.....	5.29	16.35	6.17	27.81	10.2	17.4	19.0	58.8	22.2
Michigan.....	<i>c</i> 3.26	<i>c</i> 14.66	<i>c</i> 5.68	<i>c</i> 23.60	<i>c</i> 8.9	<i>c</i> 14.3	13.8	62.1	24.1
Wisconsin.....	<i>c</i> 4.74	<i>c</i> 16.83	<i>c</i> 5.78	<i>c</i> 27.35	<i>c</i> 10.0	<i>c</i> 16.2	17.3	61.5	21.2
Minnesota.....	6.08	18.19	5.36	29.63	11.4	18.5	20.5	61.4	18.1
Iowa.....	2.66	17.54	<i>b</i> 8.48	28.68	10.0	17.9	9.3	61.1	<i>b</i> 29.6
Missouri.....	<i>b</i> 5.44	12.13	3.69	21.26	8.2	14.4	<i>b</i> 25.6	57.1	17.3
North Dakota.....	9.65	20.12	9.86	39.63	14.1	27.8	24.3	50.8	24.9
South Dakota.....	<i>c</i> 4.74	<i>c</i> 18.52	<i>c</i> 7.12	<i>c</i> 30.38	<i>c</i> 13.4	<i>c</i> 22.0	15.6	61.0	23.4
Nebraska.....	4.57	17.18	4.66	26.41	10.2	15.8	17.3	65.0	17.7
Kansas.....	<i>c</i> 2.83	<i>c</i> 13.52	<i>c</i> 4.63	<i>c</i> 20.98	<i>c</i> 9.7	<i>c</i> 15.0	13.5	64.5	<i>g</i> 22.0
Western Division:									
Montana (1902-3).....	11.66	20.71	6.91	39.28	<i>e</i> 19.4	<i>c</i> 36.7	29.7	52.7	17.6
Wyoming (1899-1900).....	<i>c</i> 2.86	<i>c</i> 18.69	<i>c</i> 4.72	<i>c</i> 26.27	<i>c</i> 17.0	<i>c</i> 23.8	10.9	71.1	18.0
Colorado.....	6.17	24.06	11.66	41.89	15.2	26.4	14.7	57.4	27.9
New Mexico.....	1.78	8.46	1.70	11.94	10.0	14.0	14.9	70.9	14.2
Arizona.....	4.37	19.71	9.61	33.69	15.4	26.3	13.0	58.5	28.5
Utah.....	5.88	14.80	8.82	29.50	9.7	19.3	19.9	50.2	29.9
Nevada.....	7.05	18.44	<i>c</i> 24.20	49.69	11.6	31.3	14.2	37.1	<i>e</i> 48.7
Idaho.....	6.57	12.13	<i>b</i> 6.46	25.16	8.9	18.5	26.1	48.2	<i>b</i> 25.7
Washington.....	7.75	20.27	8.57	36.59	15.7	28.3	21.2	55.4	23.4
Oregon.....	4.91	16.03	3.94	24.88	10.1	15.7	19.8	64.4	15.8
California.....	8.43	27.13	6.75	42.31	16.3	25.4	19.9	64.1	16.0

a Includes janitors' wages.*b* Includes debt paid.*c* Approximately.*d* Not reported separately.*e* Includes some unclassified expenditures.*f* Returns imperfect.*g* Includes repairs.

TABLE 17.—Amount expended for common schools each year since 1869-70.

Year.	Expended for—			Total expenditure.
	Sites, build- ings, furni- ture, etc.	Teachers' and superin- tendents' salaries.	All other purposes.	
1869-70.....		\$37,832,566		\$63,396,666
1870-71.....		42,580,853		69,107,612
1871-72.....		45,935,681		74,234,476
1872-73.....		47,932,050		76,238,464
1873-74.....		50,785,656		80,054,286
1874-75.....		54,722,250		83,504,007
1875-76.....		55,358,166		83,082,578
1876-77.....		54,973,776		79,439,826
1877-78.....		56,155,133		79,083,260
1878-79.....		54,639,731		76,192,375
1879-80.....		55,942,972		78,094,687
1880-81.....		58,012,463		83,642,964
1881-82.....		60,594,933		88,990,466
1882-83.....		64,798,859		96,750,003
1883-84.....		68,384,275		103,212,837
1884-85.....		72,878,993		110,328,375
1885-86.....		76,270,434		113,322,545
1886-87.....		78,639,964		115,783,890
1887-88.....		83,022,562		124,244,911
1888-89.....	\$23,395,624	87,568,306		132,539,783
1889-90.....	26,207,041	91,836,484	\$22,463,190	140,506,715
1890-91.....	26,448,047	96,303,069	24,743,693	147,494,809
1891-92.....	29,344,559	100,298,256	26,174,197	155,817,012
1892-93.....	30,294,130	104,560,339	29,316,588	164,171,057
1893-94.....	30,007,688	109,202,405	33,292,750	172,502,843
1894-95.....	29,436,940	113,872,488	32,499,951	175,809,279
1895-96.....	32,500,112	117,139,841	33,769,012	183,498,965
1896-97.....	32,376,476	119,310,503	35,995,290	187,682,269
1897-98.....	31,415,233	124,192,270	38,685,408	194,292,911
1898-99.....	31,229,308	129,345,873	39,579,416	200,154,597
1899-1900.....	35,450,820	137,687,746	41,826,052	214,964,618
1900-1901.....	39,872,278	143,378,507	44,272,042	227,522,827
1901-2.....	39,962,863	151,443,681	46,855,755	238,262,299
1902-3 ^a	46,289,074	157,110,108	48,058,443	251,457,625
1903-4 ^a	49,453,269	167,824,753	55,938,205	273,216,227

^a Subject to correction.

TABLE 18.—(1) *School expenditure per capita of population; (2) same per capita of average attendance.*

Year.	Expended per capita of population.						Expended per pupil.					
	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71.....	\$1.75	\$2.38	\$0.63	\$0.73	\$2.14	\$2.15	\$15.20	\$18.31	\$10.27	\$9.06	\$14.87	\$21.87
1871-72.....	1.83	2.40	.68	.81	2.31	2.27	15.93	18.86	10.46	9.08	16.36	23.57
1872-73.....	1.84	2.44	.68	.74	2.31	2.42	16.06	19.89	9.25	8.39	16.53	25.04
1873-74.....	1.88	2.51	.76	.68	2.38	2.40	15.85	19.89	9.01	7.55	16.57	24.36
1874-75.....	1.91	2.55	.80	.73	2.36	2.76	15.91	20.17	8.98	7.51	16.69	26.85
1875-76.....	1.85	2.45	.79	.55	2.37	2.78	15.70	19.14	8.65	6.70	16.91	26.35
1876-77.....	1.72	2.29	.72	.51	2.21	2.61	14.64	17.89	7.68	6.25	15.93	24.69
1877-78.....	1.67	2.15	.70	.56	2.14	2.73	13.67	16.55	7.21	5.98	15.08	25.82
1878-79.....	1.56	2.03	.63	.55	2.00	2.53	12.97	16.05	6.76	5.65	14.22	23.39
1879-80.....	1.56	1.97	.68	.55	2.03	2.41	12.71	15.64	6.60	5.40	14.39	22.59
1880-81.....	1.63	2.08	.72	.58	2.09	2.54	13.61	17.14	7.22	5.72	15.19	23.81
1881-82.....	1.70	2.11	.78	.64	2.19	2.59	14.05	17.35	7.63	6.25	15.79	24.32
1882-83.....	1.80	2.22	.82	.68	2.34	2.74	14.55	18.17	7.46	6.17	16.69	25.39
1883-84.....	1.88	2.25	.84	.74	2.48	2.83	14.63	18.37	7.44	6.26	16.90	24.69
1884-85.....	1.96	2.38	.88	.82	2.53	2.90	15.12	19.19	7.32	6.74	17.53	26.31
1885-86.....	1.97	2.36	.88	.87	2.54	2.88	15.06	19.11	7.33	6.93	17.45	25.52
1886-87.....	1.97	2.35	.90	.87	2.55	2.76	15.07	19.38	7.33	6.88	17.45	24.85
1887-88.....	2.07	2.48	.95	.87	2.68	2.96	15.71	20.60	7.61	6.60	18.29	27.38
1888-89.....	2.17	2.59	.98	.94	2.76	3.28	16.55	21.64	7.77	7.12	19.30	29.37
1889-90.....	2.24	2.76	.99	.97	2.81	3.37	17.23	23.58	7.78	7.28	19.70	30.57
1890-91.....	2.31	2.78	1.06	1.04	2.85	3.91	17.54	23.66	8.52	7.78	19.42	33.42
1891-92.....	2.40	2.90	1.06	1.07	2.94	4.20	18.20	24.89	8.74	7.82	20.13	33.55
1892-93.....	2.48	3.02	1.09	1.06	3.06	4.20	18.58	25.01	8.65	7.72	20.62	33.57
1893-94.....	2.55	3.13	1.12	1.09	3.23	3.77	18.62	26.21	8.61	7.58	21.29	29.06
1894-95.....	2.55	3.28	1.11	1.09	3.13	3.67	18.41	26.84	8.58	7.69	20.26	27.32
1895-96.....	2.62	3.49	1.13	1.10	3.12	3.73	18.76	28.45	8.87	7.60	20.69	27.16
1896-97.....	2.63	3.65	1.17	1.04	3.06	3.56	18.67	28.77	9.32	7.09	19.75	25.86
1897-98.....	2.67	3.75	1.19	1.03	3.07	3.81	18.76	29.34	8.97	7.09	19.47	28.29
1898-99.....	2.70	3.71	1.24	1.04	3.15	3.84	19.38	29.28	9.96	7.17	20.62	28.50
1899-1900.....	2.84	3.99	1.24	1.08	3.27	4.21	20.21	31.82	9.61	7.32	21.12	30.18
1900-1901.....	2.94	4.20	1.28	1.10	3.38	4.25	21.23	33.70	9.53	7.78	22.46	30.93
1901-2.....	3.03	4.22	1.33	1.16	3.52	4.62	21.53	33.39	9.91	8.16	22.83	32.26
1902-3 ^a	3.15	4.44	1.34	1.22	3.61	4.80	22.75	35.19	10.17	8.92	23.98	32.85
1903-4 ^a	3.36	4.68	1.44	1.30	3.85	5.44	24.14	36.75	10.57	9.58	25.70	35.66

^a Subject to correction.

STATE SCHOOL SYSTEMS.

LXXXI

TABLE 19.—*Wealth and school expenditure, 1880 and 1890.*

State or Territory.	True valuation of real and personal property. ^a		Expenditure for public schools (excluding debt paid).		Expended for public schools on each \$100 of true valuation of all real and personal property.	
	1880.	1890.	1880.	1890.	1880.	1890.
United States.....	\$43,642,000,000	\$64,829,040,611	\$78,094,687	\$140,506,715	<i>Cents.</i> 17.9	<i>Cents.</i> 21.7
North Atlantic Division...	17,533,000,000	21,435,491,864	28,538,058	48,023,492	16.3	22.4
South Atlantic Division...	3,759,000,000	5,132,980,666	5,130,492	8,767,165	13.6	17.1
South Central Division...	3,882,000,000	6,193,230,433	4,872,829	10,678,680	12.6	17.2
North Central Division...	16,186,000,000	25,255,915,549	35,285,635	62,823,563	21.8	24.9
Western Division.....	2,282,000,000	6,811,422,039	4,267,673	10,213,815	18.7	15.0
North Atlantic Division:						
Maine.....	511,000,000	489,134,128	1,067,991	1,327,553	20.9	27.1
New Hampshire.....	363,000,000	325,128,740	565,339	^b 844,333	15.6	26.0
Vermont.....	302,000,000	265,567,323	446,217	711,072	14.8	26.8
Massachusetts.....	2,623,000,000	2,803,645,447	4,983,900	8,286,062	18.9	29.6
Rhode Island.....	400,000,000	504,162,352	526,112	884,966	13.2	17.6
Connecticut.....	779,000,000	835,120,219	1,408,375	2,157,014	18.1	25.8
New York.....	6,308,000,000	8,576,701,991	10,296,977	17,543,880	16.3	20.5
New Jersey.....	1,305,000,000	1,445,285,114	1,873,465	^c 3,340,190	14.4	23.1
Pennsylvania.....	4,942,000,000	6,190,746,550	7,369,682	12,928,422	14.9	20.9
South Atlantic Division:						
Delaware.....	136,000,000	175,678,795	207,281	275,000	15.2	15.7
Maryland.....	837,000,000	1,085,473,048	1,544,367	1,910,663	18.5	17.6
District of Columbia...	220,000,000	343,596,733	438,567	905,777	19.9	26.4
Virginia.....	707,000,000	862,318,070	946,109	1,604,509	13.4	18.6
West Virginia.....	350,000,000	438,954,881	707,553	1,198,453	20.2	27.3
North Carolina.....	461,000,000	584,148,999	376,062	714,900	8.2	12.2
South Carolina.....	322,000,000	400,911,303	324,629	450,936	10.1	11.2
Georgia.....	603,000,000	852,409,449	471,029	1,190,354	7.8	14.0
Florida.....	120,000,000	389,489,388	114,895	516,533	9.6	13.3
South Central Division:						
Kentucky.....	902,000,000	1,172,232,313	1,069,030	2,140,678	11.9	18.3
Tennessee.....	705,000,000	887,956,143	744,180	1,526,241	10.6	17.2
Alabama.....	428,000,000	622,773,504	500,000	890,000	11.7	14.3
Mississippi.....	354,000,000	454,242,688	830,705	1,109,575	23.5	24.4
Louisiana.....	382,000,000	495,301,597	411,858	817,110	10.8	16.5
Texas.....	825,000,000	2,105,576,766	1,030,000	3,178,300	12.5	15.1
Arkansas.....	286,000,000	455,147,422	287,056	1,016,776	10.0	22.3
Oklahoma.....						
Indian Territory.....						
North Central Division:						
Ohio.....	3,238,000,000	3,951,382,384	7,166,963	10,602,238	22.1	26.8
Indiana.....	1,681,000,000	2,095,176,626	4,491,850	5,245,218	26.7	25.0
Illinois.....	3,210,000,000	5,066,751,719	7,014,092	11,645,126	21.9	23.0
Michigan.....	1,580,000,000	2,095,016,272	2,775,917	5,349,366	17.6	25.5
Wisconsin.....	1,139,000,000	1,833,308,523	2,177,023	3,801,212	19.1	20.7
Minnesota.....	792,000,000	1,691,851,927	1,328,429	4,187,310	16.8	24.7
Iowa.....	1,721,000,000	2,287,348,333	4,484,043	6,382,953	26.1	27.9
Missouri.....	1,562,000,000	2,397,902,945	2,675,364	5,434,262	17.1	22.7
North Dakota.....	118,000,000	337,006,506	245,000	626,949	20.8	18.6
South Dakota.....		425,141,299		1,199,630		28.2
Nebraska.....	385,000,000	1,275,685,514	1,108,617	3,376,332	28.8	26.5
Kansas.....	760,000,000	1,799,343,501	1,818,337	4,972,967	23.9	27.6
Western Division:						
Montana.....	40,000,000	453,135,209	78,730	364,084	19.7	8.0
Wyoming.....	54,000,000	169,773,710	28,505	225,000	5.3	13.3
Colorado.....	240,000,000	1,145,712,267	395,227	1,681,379	16.5	14.7
New Mexico.....	49,000,000	231,459,897	28,973	85,000	5.9	3.7
Arizona.....	41,000,000	188,880,976	61,172	181,914	14.9	9.6
Utah.....	114,000,000	349,411,234	132,194	394,685	11.6	11.3
Nevada.....	156,000,000	180,323,668	220,245	161,481	14.1	9.0
Idaho.....	29,000,000	207,896,591	38,411	169,020	13.2	8.1
Washington.....	62,000,000	760,698,726	112,615	958,111	18.2	12.6
Oregon.....	154,000,000	590,396,194	307,031	805,979	19.9	13.7
California.....	1,343,000,000	2,533,733,627	2,864,571	5,187,162	21.3	20.5

^a From United States census reports.^b Includes debt paid, if any.^c Amount of revenue.

TABLE 20.—*Permanent school funds and school lands.*

State or Territory.	Permanent common school funds, State and local. ^a	Productive school lands.		Total value of permanent funds and productive lands.	Unproductive school lands.	
		Acres under lease.	Estimated value of same.		Acres not under lease.	Estimated value of same.
1	2	3	4	5	6	7
United States.....	\$193,261,855					
North Atlantic Division.....	22,637,222					
South Atlantic Division.....	4,658,695					
South Central Division.....	48,812,249					
North Central Division.....	99,615,712					
Western Division.....	17,537,977					
North Atlantic Division:						
Maine.....	442,758					
New Hampshire.....	(b)	0	0	(b)	0	0
Vermont.....	880,218		\$730,744	\$1,610,962		
Massachusetts.....	4,770,548					
Rhode Island.....	257,413					
Connecticut.....	3,054,541					
New York.....	8,921,863					
New Jersey.....	4,309,881	(c)			(c)	
Pennsylvania.....						
South Atlantic Division:						
Delaware (1896-97).....	d 350,000	0	0	d 350,000	0	0
Maryland.....						
District of Columbia.....	0	0	0	0	0	0
Virginia (1902-3).....	1,783,828	0	0	1,783,823	0	0
West Virginia.....	e 1,000,000					
North Carolina.....	200,000	0	0	200,000	\$500,000	\$500,000
South Carolina.....						
Georgia.....	(f)	(g)				
Florida.....	1,324,867					
South Central Division:						
Kentucky (1901-2).....	2,315,627					
Tennessee.....	2,512,500					
Alabama (1902-3).....	2,135,313					
Mississippi (1902-3).....	3,406,667					
Louisiana.....						
Texas.....	37,253,642	511,792,664	11,792,664	49,046,306	7,000,000	7,000,000
Arkansas.....	1,128,500					
Oklahoma.....		2,050,000	20,000,000			
Indian Territory.....						
North Central Division:						
Ohio (1901-2).....	4,003,677					
Indiana.....	10,637,564				723	35,813
Illinois.....	17,429,569					
Michigan.....	5,211,867					
Wisconsin.....	3,609,213	0	0	3,609,213	25,148	150,000
Minnesota.....	15,978,478	0	0	15,978,478	1,000,000	5,354,088
Iowa.....	4,756,457	1,160				
Missouri.....	13,151,372					
North Dakota.....	4,764,923	(h)			i 2,166,154	21,661,540
South Dakota.....	4,095,938	1,197,899	17,968,484	22,064,422	705,925	j 7,059,251
Nebraska.....	7,976,006	1,920,458	k 12,000,000	19,976,006	497	2,000
Kansas (1902-3).....	8,000,648	200,160	600,480	8,601,128	310,280	930,840
Western Division:						
Montana (1902-3).....	618,777	1,476,638	2,500,000	3,118,777	1,000,000	1,500,000
Wyoming (1899-1900).....	48,000	1,309,925	1,004,580	1,052,580	2,691,980	1,345,960
Colorado.....	l 1,251,901	m 1,720,000	m 3,440,000	m 4,691,901	m 1,675,000	m 3,350,000
New Mexico (1902-3).....	0	949,760	1,187,200	1,187,200	2,477,440	3,096,800
Arizona.....						
Utah.....	444,418	72,000	126,000	570,418	1,838,361	2,757,541
Nevada.....	1,602,275					
Idaho (1902-3).....	1,241,968	57,584	575,840	1,817,808	942,416	9,424,160
Washington.....	3,431,627	757,867				
Oregon.....	4,604,261					
California.....	4,294,750					

^a Including unpaid principal due on contracts for purchase of school lands.^b Some local funds; amount not known.^c Riparian lands; amount not determined.^d Approximately.^e Limited to \$1,000,000 by constitutional amendment of 1902.^f Half the Western and Atlantic R. R. and some stock of the Georgia R. R.^g Oyster lands; amount not known.^h Included in column 6.ⁱ Includes lands under lease.^j Constitutional minimum price, \$10 per acre.^k Estimated by State superintendent.^l In 1901-2.^m In 1902-3.

DIAGRAM 1.—Number of pupils enrolled in the common schools of the United States.

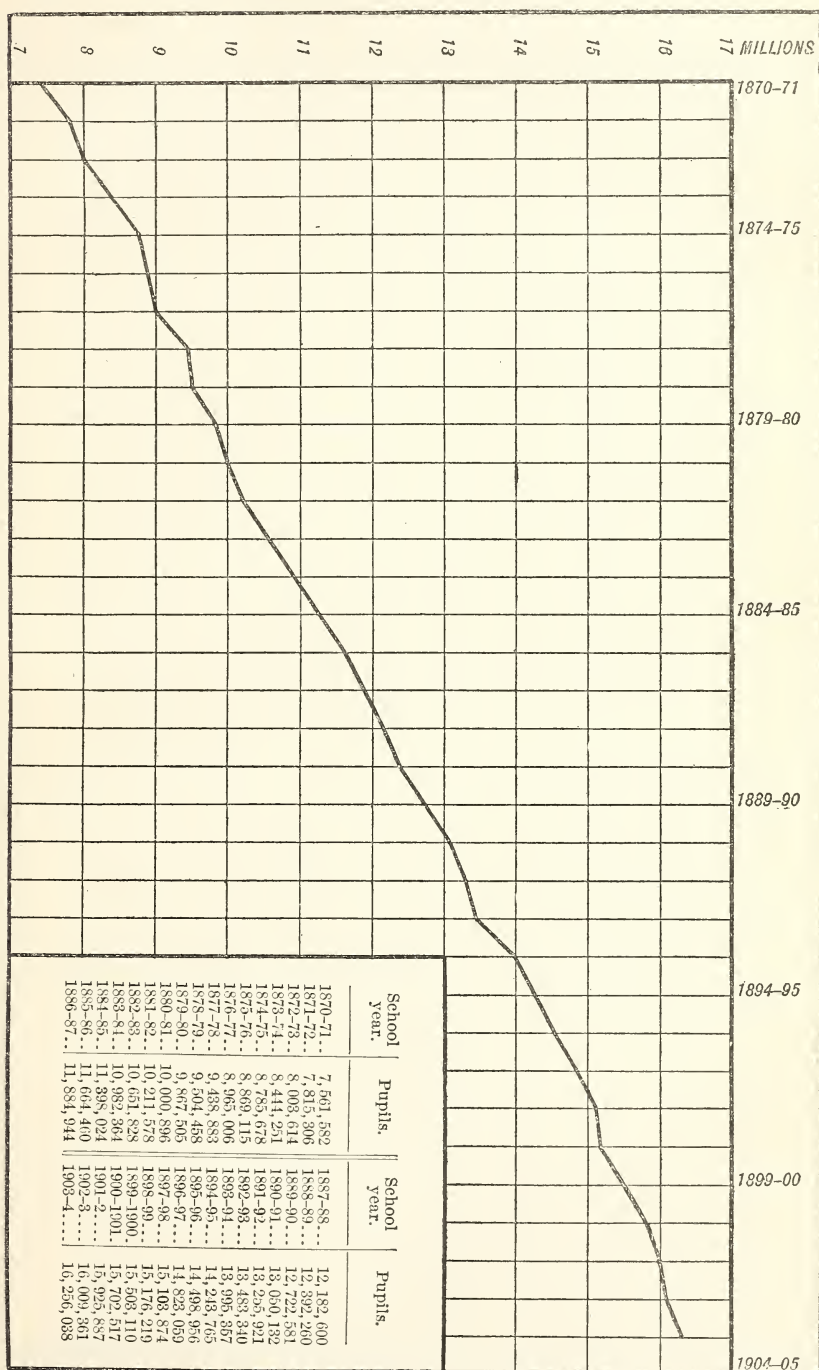


DIAGRAM 2.—Per cent of population enrolled in common schools.

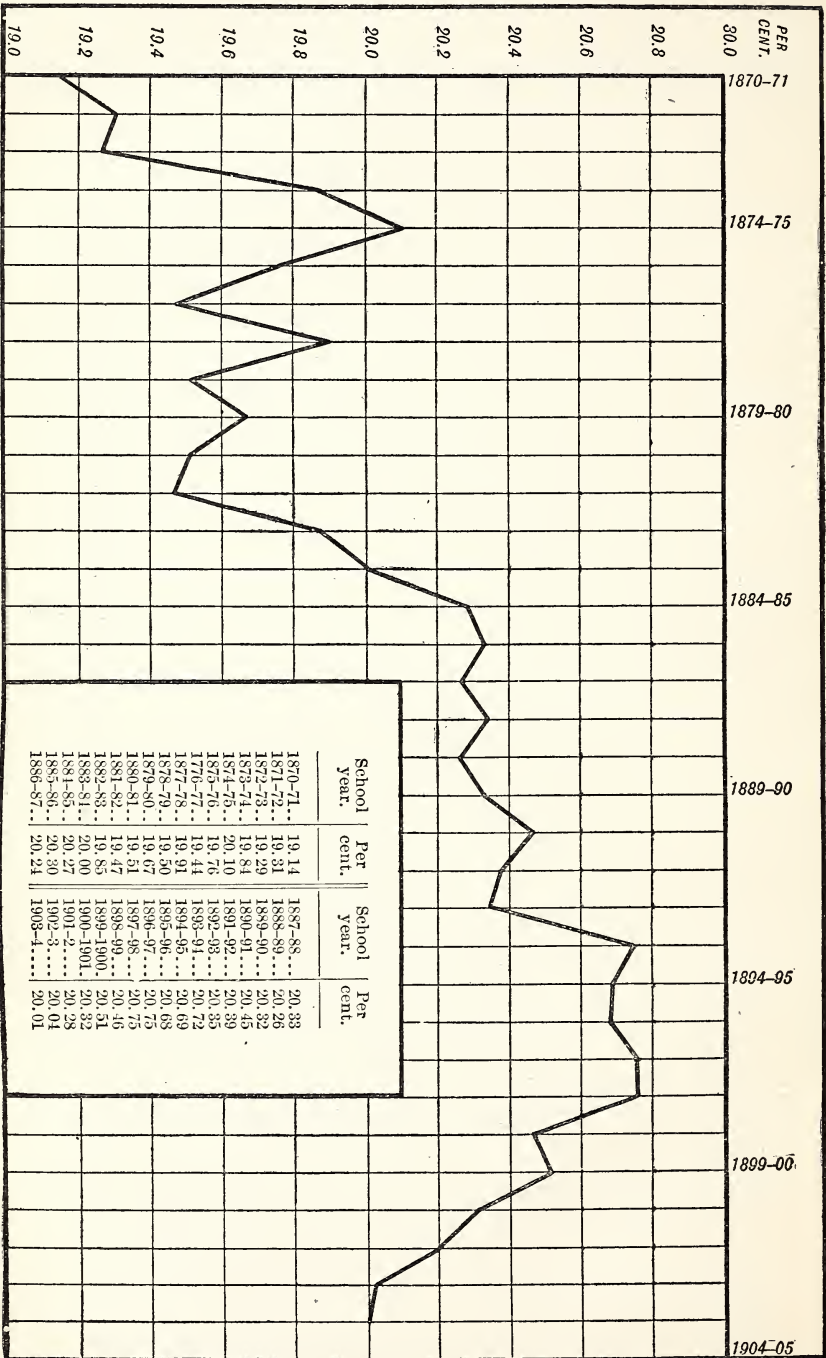


DIAGRAM 3.—Length of school term.

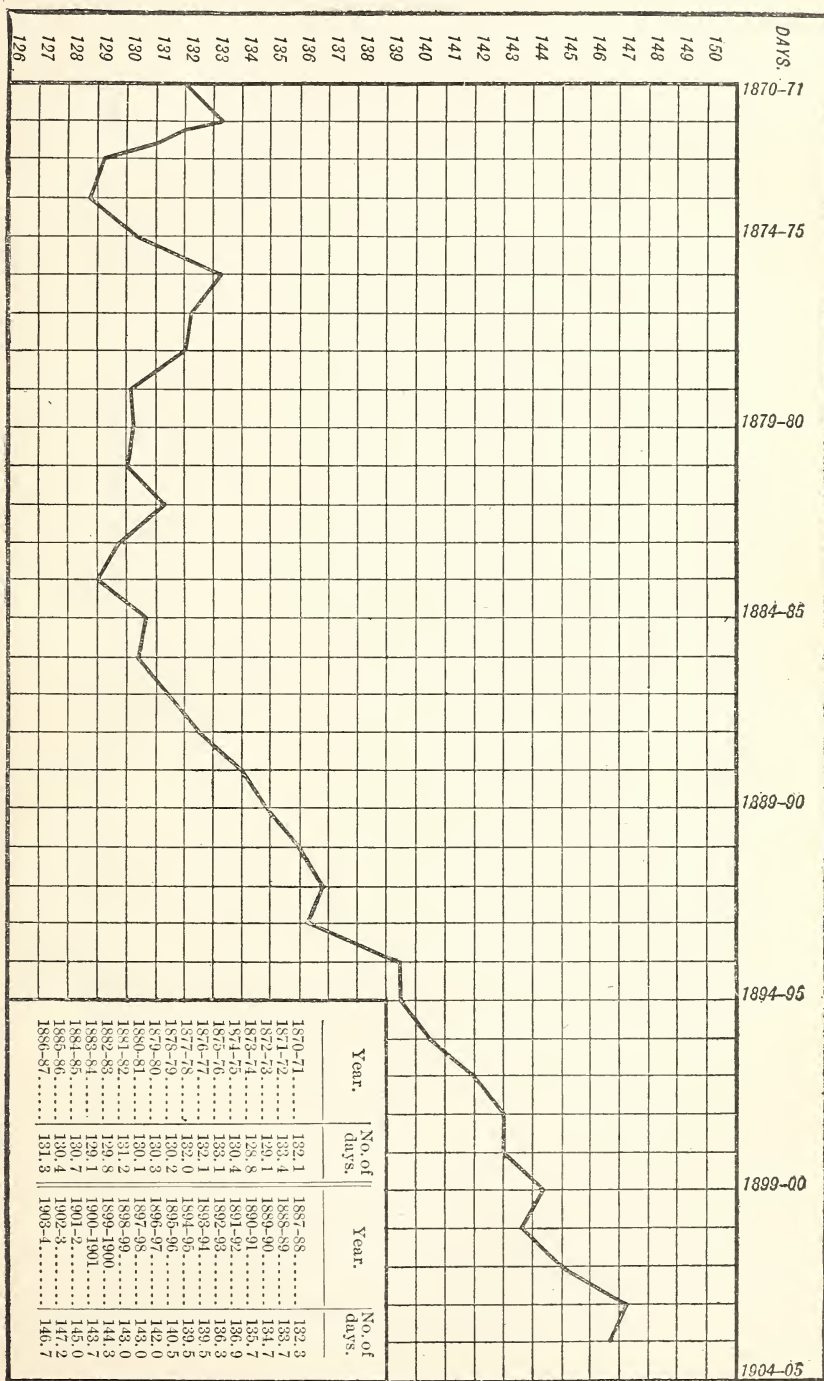


DIAGRAM 4.—School expenditure per capita of population.

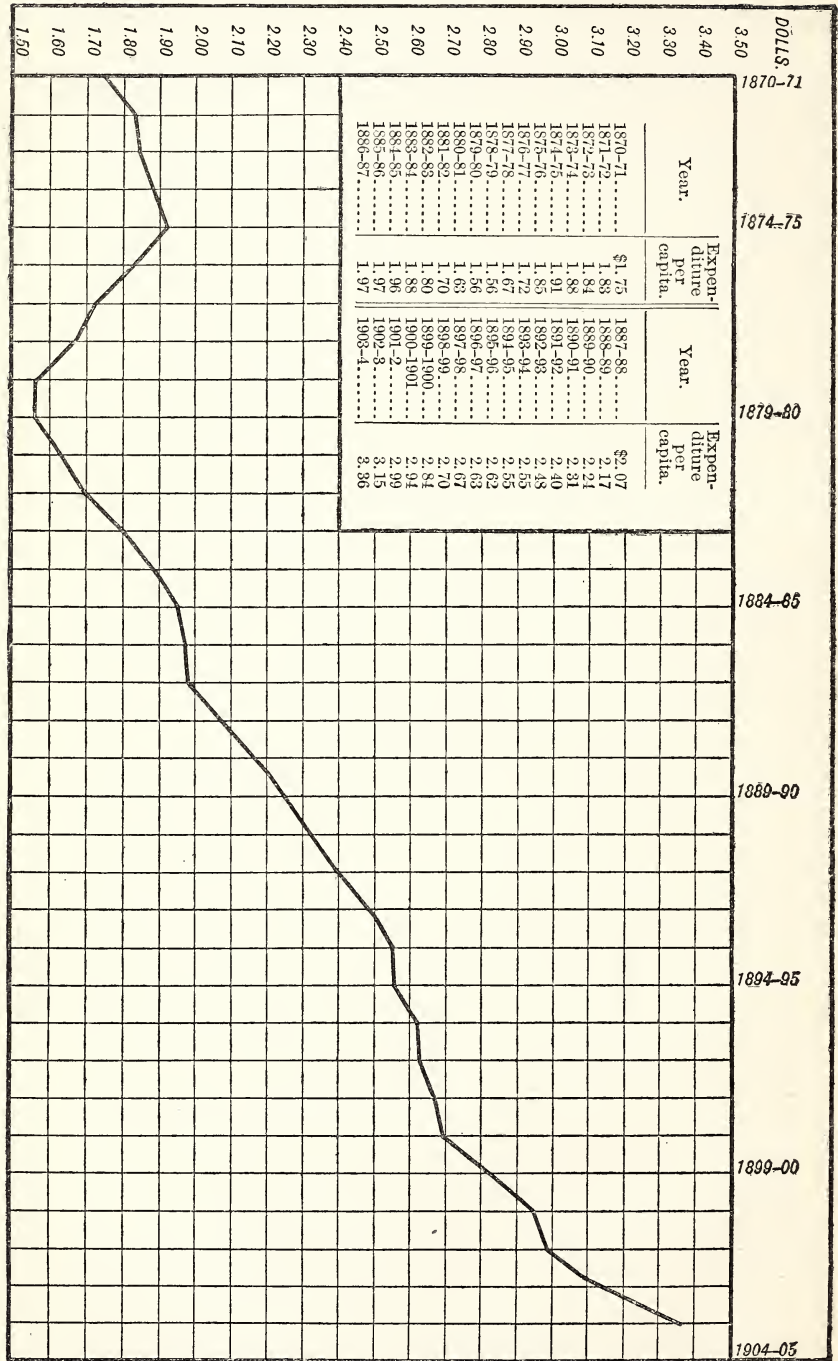


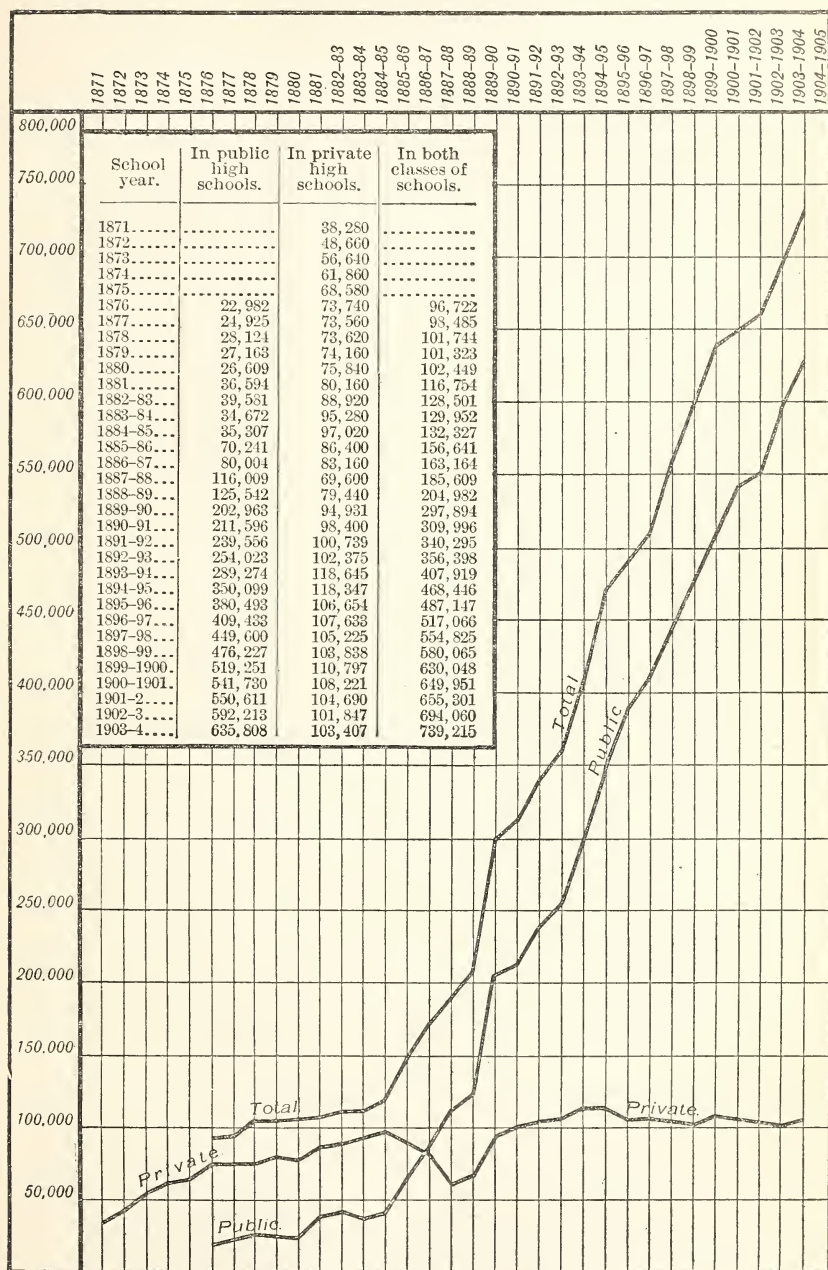
DIAGRAM 5.—*Number of secondary students in public and private secondary schools.*

DIAGRAM 6.—Per cent of population enrolled as secondary students in private and public secondary schools for a series of years.

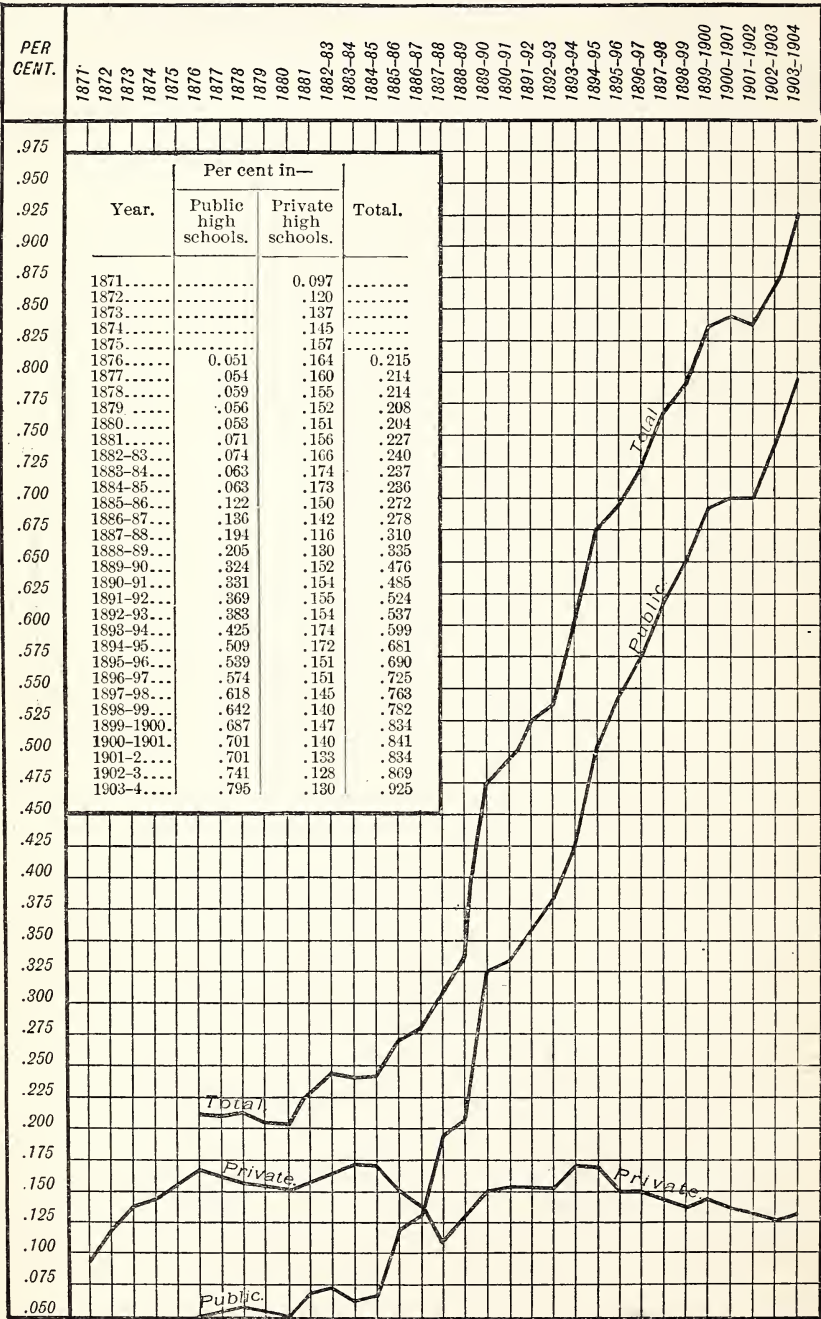


DIAGRAM 7.—Showing number of college students each year since 1872.

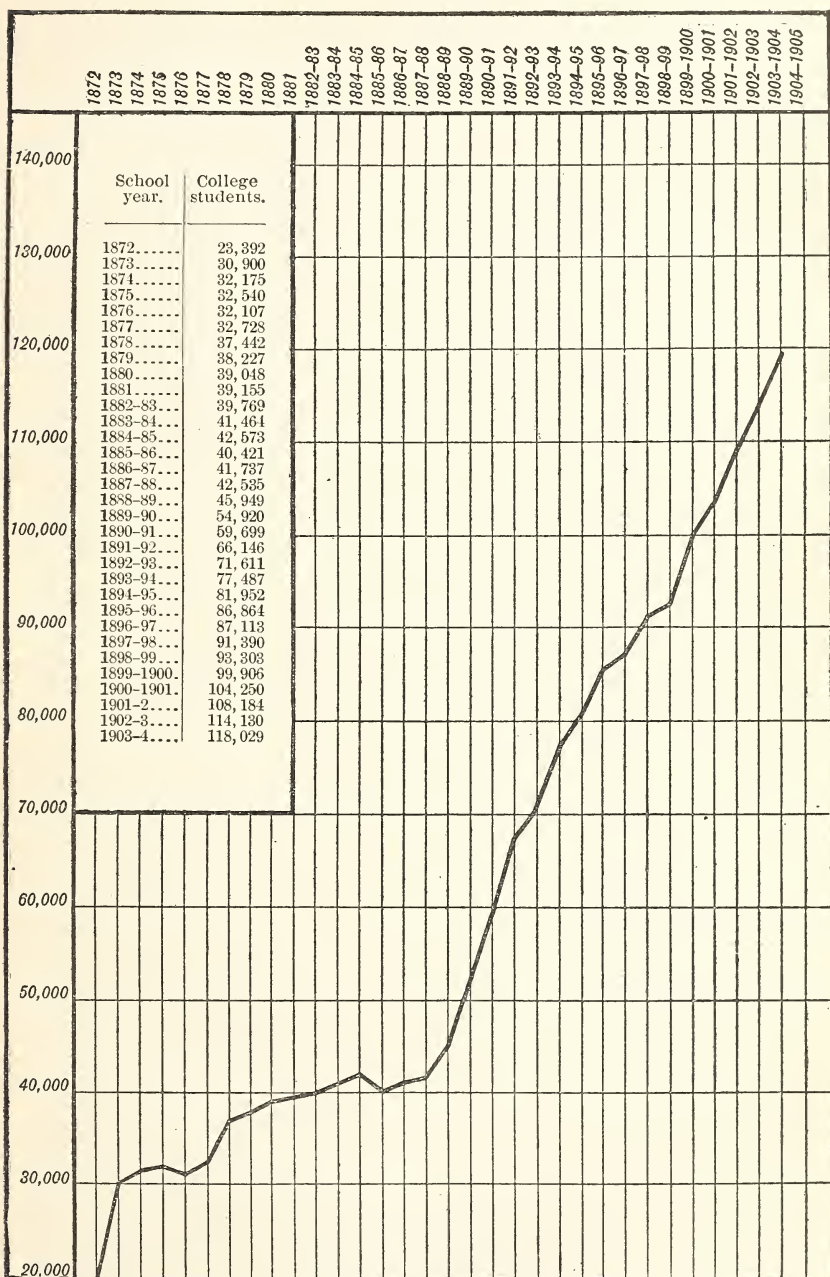
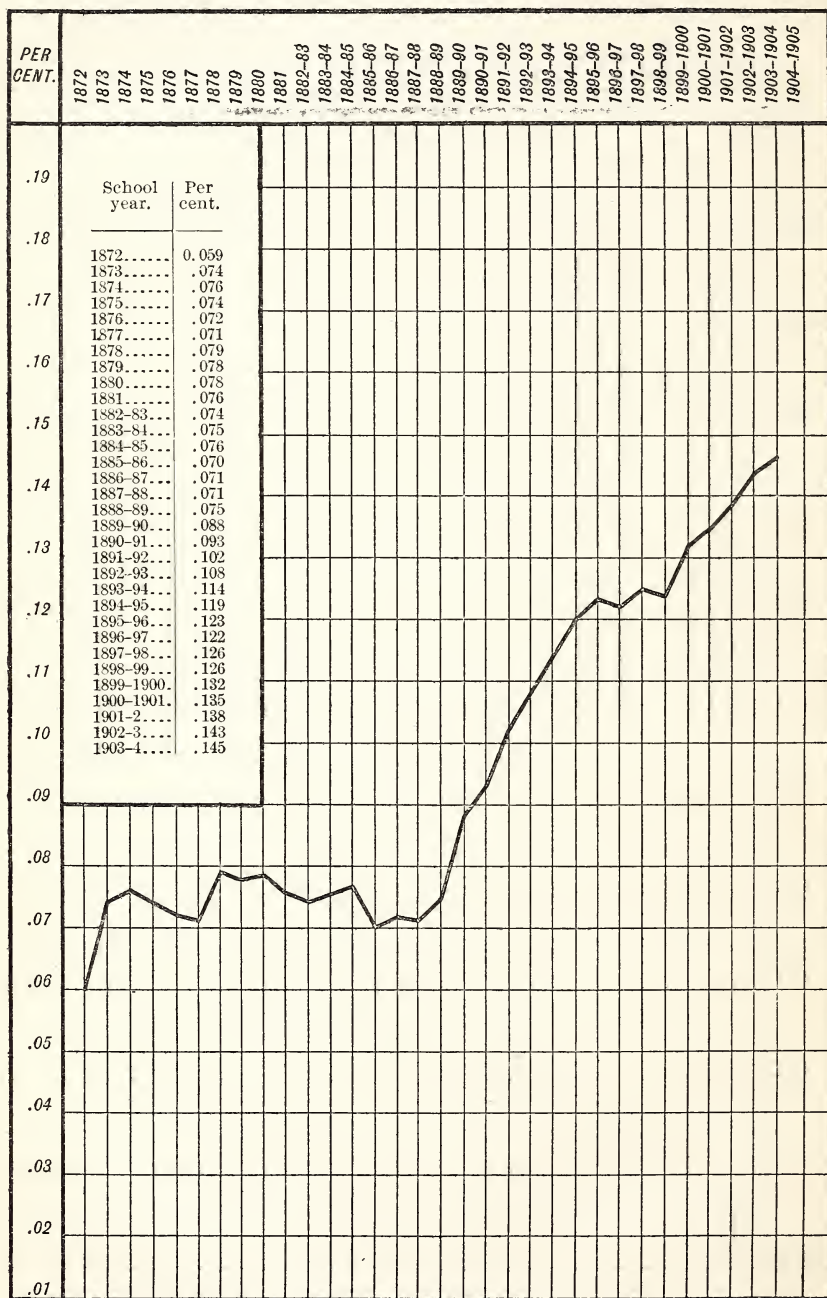


DIAGRAM 8.—*Showing what per cent of the total population was enrolled as college students during each year since 1872.*



COMMERCIAL EDUCATION.

1. PRIVATE "COMMERCIAL COLLEGES."

Special courses for the higher education of persons desiring to enter upon business careers are of comparatively recent date in this country. For many years the only provision made for business training was to be found in private commercial or business colleges, many of which have rendered and are still rendering excellent service in their special field. Their work, however, cannot be called higher training, as it is confined mostly to preparing young persons for clerical positions, and includes such subjects as writing, arithmetic, and bookkeeping, to which are added a little commercial geography and commercial law. The requirements for admission are very meager, and there is given only a very limited amount of general culture. In 1904 there were reported to this Office 499 business colleges with an attendance of 138,363 students.

The instruction given by this class of schools is fairly represented by the subjects included in the courses of study of the two institutions following:

Eastman School, Poughkeepsie, N. Y.—Arithmetic, accounting, bookkeeping, banking, commercial law, commercial geography, business practice and office methods, stenography, typewriting, economics, and government.

Peirce School, Philadelphia, Pa.—Bookkeeping, business practice, auditing, commercial arithmetic commercial law, commercial geography, business forms and customs, stenography, and typewriting.

In addition to the above studies, instruction is given in penmanship and English, and some of the institutions of this grade make provision for instruction in modern languages. The courses of study vary in length from three to thirty months.

2. HIGH SCHOOL BUSINESS COURSES—BUSINESS HIGH SCHOOLS.

In 1904 there were reported 717 public high schools maintaining regular business courses, in which there were enrolled 42,213 students, while 3,192 schools gave instruction in bookkeeping to 83,313 students. The number of pupils in business courses in public high schools has increased so rapidly that it has been found necessary in a number of the larger cities to provide separate business high schools. The courses of study maintained by these business high schools vary in length from two to four years. The courses in San Francisco and Washington require two years of work; those in Louisville, Brooklyn, Philadelphia (schools for girls), and Pittsburg require three years; and those in Los Angeles, New York, and Syracuse require four years. The dates when the separate schools were established are as follows: Washington, 1890; Los Angeles, 1895; Louisville, 1898; Brooklyn, 1899; San Francisco and Philadelphia, 1900; New York, 1902; Syracuse, 1903.

The regular course in the high school of commerce of the borough of Manhattan, New York City, extends through four years, and is as follows:

First year.—Required: English (4 periods), German, French, or Spanish (4), algebra (4), biology with special reference to materials of commerce (4), business knowledge and practice (6), drawing (second half year, 2), physical training (2), music (1).

Second year.—Required: English (3), German, French, or Spanish (4), plane geometry (3), chemistry with special reference to materials of commerce (4), history with special reference to economic history and geography (3), stenography (3), drawing and art study (2), physical training (2). Electives: German, French, or Spanish (4), bookkeeping and business forms (3), business arithmetic (1), commercial geography (1).

Third year.—Required: English (3), German, French, or Spanish (4), geometry and algebra (3), physics (5), history with special reference to materials of commerce (3), drawing and art study (1), physical training (2). Electives: German, French, or Spanish (4), bookkeeping and business arithmetic (3), stenography and typewriting (3), drawing and art study (2), commercial geography (1).

Fourth year.—Required: English (3), German, French, or Spanish (4), economics and economic geography (4), history of United States with special reference to industrial and constitutional aspects (4), physical training (2). Electives: A foreign language (4), advanced chemistry (4), economic biology (4), trigonometry and solid geometry (4), elementary law and commercial law (4), advanced bookkeeping, business correspondence and office practice (4), stenography and typewriting (4), drawing and art study (4), modern industrialism (1).

There is offered also a fifth year which is open to all students who have graduated from a high school course of four years. The studies of the fifth year are as follows: Required: English (3), logic (3), physical training (2). Electives: A foreign language (4), advanced mathematics (4), advanced physics (4), industrial chemistry (4), economic geography (4), history (4), banking and finance, transportation and communication (4), administrative law and international law (4), accounting and auditing (4), business organization and management (4), drawing (4), advanced economics (3).

3. HIGHER COMMERCIAL EDUCATION.

For some time a large number of universities and colleges have maintained business courses modeled more or less after those of the business colleges mentioned above. The number of such institutions in 1904 reporting students in business courses below college grade was 173. Included in this number are Roman Catholic and other institutions whose commercial courses extend through a number of years and include a considerable number of general culture studies of secondary grade.

As the departments of economics of our well-equipped universities were developed, there was introduced gradually instruction in subjects of special value to persons looking forward to business careers. While for a long time no formal courses for business training were offered, it was possible, through the system of elective studies in vogue, for students to select studies that would assist them in preparing for business life. The first step in the organization of business courses of college grade was made by the University of Pennsylvania in 1881, when the Wharton School of Finance and Economy was opened for instruction. During the past ten years the movement for the establishment of courses of study in commerce of college grade has made marked progress, and such courses are now offered by the universities of California, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Ohio, Pennsylvania, South Dakota, Texas, Utah, Vermont, and Wisconsin, Dartmouth College, New York University, and others.

In nearly all cases the requirements for admission are the same as those for admission to general culture courses leading to degrees. The first two years of the courses are usually made up of general culture studies, such as English, modern languages, mathematics, history, and theoretical economics, while the studies of a technical nature, with few exceptions, are placed in the last two years of the course. Very few of the institutions have laid down hard and fast courses of study, but the principle of allowing students to select studies suitable for their purposes is followed in most cases.

The University of California has established a college of commerce whose curriculum "is intended to afford an opportunity for the scientific study of commerce in all its relations, and for the higher education of business men and of the higher officers of the civil service." The course leads to the B. S. degree and requires the completion of 129 units, of which number elementary or general culture studies comprise 69 units; 34 units are devoted to technical studies in practical economics, 12 units to studies in law, and 14 units to electives in a special field. The students have the use of the collection of the Pacific Commercial Museum.

The college of commerce and administration of the University of Chicago has been created "to provide professional training for the practical work of business in various branches." The work of the college is on the same plane as that of the other undergraduate colleges of the university and leads to the Ph. B. degree. The work of the junior college (the first two years of the course) is the same for all students in the college. On entering the senior college the student will elect one of the four groups into which the work is divided, namely, (a) banking, (b) transportation, (c) trade and industry, (d) journalism.

The James Millikin University at Decatur, Ill., offers a course in commerce and finance extending through four years of preparatory work and four years of college work leading

to the A. B. degree. The purpose is "to furnish a scientific training of college grade for that rapidly increasing class of prospective business men who realize the growing complexity and rapidly changing character of modern commercial life and the necessity for thorough preparation for it." The commercial museum of the institution contains a considerable number of the materials of commerce.

The University of Illinois has arranged courses of study to furnish training for (1) general business, (2) commerce and the consular service, (3) banking, (4) transportation, (5) insurance, (6) journalistic work. The courses extend through four years and lead to the A. B. degree. A considerable collection of commercial products, raw and finished, has been made in the various departments of the university and is used by students in the business courses. At various times, especially during the senior year, classes in the business courses are required to make visits of inspection to industrial and mercantile establishments.

The commercial course of the Indiana University extends through four years and leads to the A. B. degree. It includes fifteen hours of English (hour meaning one recitation per week during a university term), fifteen hours of mathematics, fifteen hours of science, thirty hours of language, sixty-two hours under the direction of the department of economics and social science, of which forty-eight hours must be in that department, twenty-eight hours of optional studies selected from groups of designated electives, and fifteen hours of free electives.

In the school of political and social science of the University of Iowa there is a course in commerce and a course in government and administration, each extending through four years and leading to the A. B. degree. To provide practical instruction a commercial museum has been founded.

The University of Kansas has organized courses in business extending through four years and leading to the degree of A. B. The courses are (*a*) general business, (*b*) banking, (*c*) insurance, (*d*) journalism, and comprise elective studies open to all students. The first two years of the courses are the same as the other courses of the university leading to the A. B. degree, specialization beginning with the junior year.

The University of Michigan has organized a course in commerce in the department of literature, science, and the arts. In the case of candidates for a degree enrollment in the course in commerce takes place at the beginning of the third year of residence in the university and may be continued either for two years, leading to the bachelor's degree; or for three years, leading to the master's degree. Undergraduates are expected to elect ten hours per semester and graduate students thirteen hours per semester from the special or technical courses in commerce and industry.

The Amos Tuck School of Administration and Finance of Dartmouth College comprises two years of work. The first year of the school requires for admission three years of college work and is coordinate with the senior year of the college. On the completion of the work of the second year of the school the degree of master of commercial science is conferred. It is the purpose of the school to direct its work not only toward first giving the man a broad basis of business education, but more and more toward imposing upon this broad basis a training that will meet the demand for men in specific businesses. There is offered instruction of particular value in preparation for banking, brokerage and investments, transportation, insurance, commerce, and journalism. The commercial museum contains exhibits of domestic industries, comprising samples of raw materials, partly finished and finished products and by-products, lantern slides, photographs, maps, charts, and other illustrative matter.

New York University has a school of commerce, accounts, and finance, giving instruction in both day and evening classes. To obtain the degree of bachelor of commercial science requires an attendance of two years at the day sessions or of three years at the evening sessions. Its courses of study are intended to lay the groundwork for successful careers in the following vocations: General business (manufacturing and mercantile), expert public accountant, banker, stock and bond broker, credit man, insurance, real estate business,

advertising manager, teacher in high schools and colleges of commerce, and consular service. There have been added recently five one-year special courses requiring an attendance of four evenings a week for the benefit of men engaged in business. These special courses are one each in accounting, banking, general business, real estate, and insurance.

The course in commerce and administration of the Ohio State University extends through four years and leads to the A. B. degree. The selection of studies is left largely to the student.

The Wharton School of Finance and Commerce of the University of Pennsylvania offers several courses of study. The four-year course leads to the B. S. degree. The work of the first two years of the course is largely prescribed, while that of the last two years is elective and is specialized along the lines selected by the student for his chosen career. The special two-year course in business practice and banking consists of prescribed studies, and upon its completion a certificate of proficiency is granted. The evening school of accounts and finance was established in 1904, and the regular course offered in it extends through three years.

The University of Texas in its school of political science has arranged groups of studies in preparation for work in commerce, journalism, administration, diplomatic and consular service. The groups are not open to freshmen nor to sophomores unless they are of high rank, and are intended to extend over two to three years of the student's work. These groups may be counted as regular work for the A. B. degree.

The University of Vermont maintains a course in commerce and economics extending through four years and leading to the A. B. degree, which aims to give training for business in general rather than for any particular business.

The University of Wisconsin offers courses in commerce extending through four years and leading to the A. B. degree. Required studies comprise nearly all the work of the first two years, and with the exception of elementary economics and commercial geography consist of those which have long been considered as fundamental and necessary in a liberal education. The required work of the junior and senior years includes continuation courses in modern languages, money and banking, transportation, commercial law, and business administration. In addition, the student is required to select one of the elective groups and a certain number of free electives. The elective groups now available are in banking and finance, transportation, manufacturing industries, agricultural industries, and consular service. Others may be arranged on consultation with the director.

In the following pages are given the topics under which instruction in commercial branches of study is given by the several universities and colleges, including such instruction offered in the departments of economics of a number of institutions where no definite courses in commerce are announced. The general culture studies that are prescribed or that may be elected in the several courses are not included.

Instruction in commercial branches by universities and colleges (including higher institutions giving elementary and secondary instruction in commercial branches).

Howard College, Birmingham, Ala.—Bookkeeping, business forms, commercial arithmetic.

St. Bernard College, St. Bernard, Ala.—Bookkeeping, commercial law.

Spring Hill College, Spring Hill, Ala.—Bookkeeping, stenography and typewriting.

University of Arizona, Tucson, Ariz.—Bookkeeping, commercial law, business forms, stenography and typewriting.

Ouachita College, Arkadelphia, Ark.—Bookkeeping, commercial law, business forms, stenography and typewriting.

Arkansas Cumberland College, Clarksville, Ark.—Bookkeeping, commercial law, stenography and typewriting.

University of Arkansas, Fayetteville, Ark.—Commercial law, banking, transportation, tariff history and problems, industrial history of the United States, trusts, labor problem.

Philander Smith College, Little Rock, Ark.—Stenography, typewriting, bookkeeping, commercial law.

University of California.—Introduction to commercial geography, lectures on commerce, introduction to economics, economics of industry, materials of commerce, geography of international trade, American agriculture, history of commerce, modern industrialism, theory and history of banking, practical banking, money, international exchanges, statistics, insurance, economic factors in American history,

industrial and commercial development of the United States, labor, principles of accounting, investment market, financial history of the United States, modern industrial processes, mechanism and technic of trade, business forms and practice, economic position of the great powers, consular service, customs tariffs and regulations, modern colonial economies, communication and transportation, commercial resources of the Spanish-American countries, history and theory of prices, commerce of China and Japan, commercial law, elementary law and jurisprudence.

St. Vincent's College, Los Angeles, Cal.—Bookkeeping, stenography, typewriting, commercial arithmetic, banking, commercial law.

University of Southern California, Los Angeles, Cal.—Bookkeeping, business practice, commercial arithmetic, commercial law, stenography, typewriting.

St. Mary's College, Oakland, Cal.—Business arithmetic, bookkeeping, typewriting, business practice and office methods, stenography, commercial law, commercial geography, history of commerce, insurance, statistics, transportation, trade organization.

Throop Polytechnic Institute, Pasadena, Cal.—Bookkeeping, banking, stenography, typewriting, commercial geography, commercial law, finance.

St. Ignatius College, San Francisco, Cal.—Bookkeeping, stenography.

University of the Pacific, San Jose, Cal.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, stenography, typewriting.

Santa Clara College, Santa Clara, Cal.—Bookkeeping, commercial law, stenography, typewriting.

Leland Stanford Junior University, Stanford University, Cal.—Banking, American transportation system, railway rates and finance, corporations and trusts, commerce of the Pacific, industrial history of England and United States, labor problem, communications, law of contracts.

University of Colorado, Boulder, Colo.—Money and banking, industrial history of the United States, economic and commercial geography, transportation.

College of the Sacred Heart, Denver, Colo.—Bookkeeping, commercial law, stenography, typewriting.

University of Denver, University Park, Colo.—Commercial geography, history of commerce, American diplomacy in the Orient.

Connecticut Agricultural College, Storrs, Conn.—Bookkeeping, stenography, typewriting.

Yale University, New Haven, Conn.—Law of contracts, insurance, corporation economics. Industrial history of the United States, commerce and commercial policy in the nineteenth century, railroads.

Howard University, Washington, D. C.—Commercial law, commercial geography, bookkeeping, stenography, typewriting, commercial history, transportation, insurance, production.

St. John's College, Washington, D. C.—Bookkeeping, commercial law, commercial geography, stenography, typewriting.

John B. Stetson University, De Land, Fla.—Bookkeeping, business arithmetic, commercial law, commercial geography, stenography, typewriting.

St. Leo College, St. Leo, Fla.—Commercial arithmetic, bookkeeping, stenography, commercial law, accounting.

Rollins College, Winter Park, Fla.—Bookkeeping, banking, commercial law, commercial arithmetic, stenography, typewriting.

North Georgia Agricultural College, Dahlonega, Ga.—Bookkeeping, stenography, typewriting, commercial law, commercial geography, commercial economics.

University of Idaho, Moscow, Idaho.—Bookkeeping, business forms, commercial law.

St. Viator's College, Bourbonnais, Ill.—Bookkeeping, commercial law, business forms, commercial arithmetic, stenography, typewriting.

Carthage College, Carthage, Ill.—Bookkeeping, commercial arithmetic, business forms, commercial law, stenography, typewriting.

St. Ignatius College, Chicago, Ill.—Bookkeeping, commercial law, business forms, stenography, typewriting.

University of Chicago.—History of commerce, commercial geography, modern industries, organization of the retail market, economic geography of North America and Europe, insurance, mathematics of insurance, laws of insurance, accounting, modern business methods, commercial law. Problems of American agriculture, organization of business enterprise, banking, commercial crises, railway transportation, statistics, contracts, bills, and notes.

James Millikin University, Decatur, Ill.—Commercial arithmetic, bookkeeping, accounting and office practice, stenography, typewriting, materials of commerce, history of commerce, introduction to commerce, commercial geography, auditing, commercial organization and management, elementary law, foreign commerce of the United States, industries and resources of the United States, money and banking, commercial law, corporation finance, distribution and transportation, relation of science to business, administration of corporate and public industries, insurance, international law, and diplomacy.

Eureka College, Eureka, Ill.—Bookkeeping, stenography, typewriting, commercial law, business forms, banking.

Northwestern University, Evanston, Ill.—Modern industrial and commercial history, money and banking, commercial geography and international trade, financial and tariff history of the United States.

Ewing College, Ewing, Ill.—Bookkeeping, commercial arithmetic, commercial law, banking, commercial geography, stenography, typewriting.

Greenville College, Greenville, Ill.—Bookkeeping, commercial geography, commercial and elementary law, business practice, history of commerce, introduction to commerce, trust finance, transportation, banking, commercial credits, international law, stenography, typewriting.

Northwestern College, Naperville, Ill.—Bookkeeping, commercial arithmetic, commercial law, business practice, business forms, stenography, typewriting.

St. Bede College, Peru, Ill.—Bookkeeping, commercial law, stenography.

St. Francis Solanus College, Quincy, Ill.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Augustana College, Rock Island, Ill.—Bookkeeping, commercial law, stenography, typewriting.

University of Illinois, Urbana, Ill.—Corporation management and finance, industrial consolidations, public control of trade and industry, railway management, railway systems, statistics, economics of insurance, corporation accounting, commercial geography, history of commerce, domestic commerce and commercial politics, foreign commerce and commercial politics, history of commercial policy of the United States, history of commercial relations of the United States, domestic and foreign markets of the United States, consular and diplomatic service, seminary in railway administration, seminary in commerce, commercial law, law of contracts, insurance law, materials of commerce (agricultural, chemical, geological, vegetable, zoological), commercial grading of grains.

Westfield College, Westfield, Ill.—Bookkeeping, business practice, commercial law, stenography, typewriting.

Wheaton College, Wheaton, Ill.—Bookkeeping, commercial arithmetic, commercial law, business practice, stenography, typewriting.

Indiana University, Bloomington, Ind.—Principles of commerce, commercial geography, economic history of England and United States, transportation, money, banking, money market, accounting and business practice, business organization and management, insurance, seminary in economics.

St. Joseph's College, Collegeville, Ind.—Bookkeeping, business forms, commercial law, stenography, typewriting.

Moore's Hill College, Moore's Hill, Ind.—Bookkeeping, commercial law, commercial arithmetic, stenography, typewriting.

University of Notre Dame, Notre Dame, Ind.—Bookkeeping, business practice, commercial law, stenography, typewriting.

Taylor University, Upland, Ind.—Bookkeeping, business practice, commercial arithmetic, commercial law, corporation accounting, banking, stenography, typewriting.

Henry Kendall College, Muscogee, Ind. T.—Stenography, typewriting.

Charles City College, Charles City, Iowa.—Bookkeeping, commercial law, business practice, commercial arithmetic, commercial geography.

Amity College, College Springs, Iowa.—Bookkeeping, business practice, commercial law, commerce, transportation, commercial arithmetic.

Drake University, Des Moines, Iowa.—Bookkeeping, business practice, commercial arithmetic, commercial law, business forms, stenography, typewriting.

Upper Iowa University, Fayette, Iowa.—Bookkeeping, business practice, business arithmetic, commercial law, business forms, stenography, typewriting.

Iowa College, Grinnell, Iowa.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Lenox College, Hopkinton, Iowa.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Simpson College, Indianola, Iowa.—Bookkeeping, business practice, commercial law, commerce, transportation, stenography, typewriting.

University of Iowa, Iowa City, Iowa.—Industrial history, economic and commercial geography, resources of the United States, economics and commerce, currency and banking, corporation finance and theory of accounting, transportation, statistics, consular service, commercial policies, taxation, insurance, materials of commerce, commercial law.

Graceland College, Lamoni, Iowa.—Bookkeeping, commercial arithmetic, business practice, commercial law, economics, stenography, typewriting.

Palmer College, Le Grand, Iowa.—Bookkeeping, commercial law, commercial arithmetic, business practice, banking, stenography, typewriting.

Iowa Wesleyan University, Mount Pleasant, Iowa.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, banking, insurance, real estate, wholesaling, commission and commercial exchange.

Cornell College, Mount Vernon, Iowa.—Bookkeeping, business forms, business practice, commercial law, commercial geography, stenography, typewriting.

Central University of Iowa, Pella, Iowa.—Bookkeeping, commercial law, business practice, stenography, typewriting.

Morningside College, Sioux City, Iowa.—Bookkeeping, stenography, typewriting.

Buena Vista College, Storm Lake, Iowa.—Bookkeeping, banking, business practice, commercial law, stenography, typewriting, business forms.

Western College, Toledo, Iowa.—Bookkeeping, banking, business practice, business arithmetic, commercial law, business forms, stenography, typewriting.

St. Benedict's College, Atchison, Kans.—Bookkeeping, commercial law.

Baker University, Baldwin, Kans.—Bookkeeping, business practice, commercial law, commercial geography, banking, commercial arithmetic, stenography, typewriting.

Emporia College, Emporia, Kans.—Bookkeeping, banking, stenography, typewriting, commercial law, commercial geography, theory of insurance.

Highland University, Highland, Kans.—Bookkeeping, commercial law, stenography, typewriting.

Campbell College, Holton, Kans.—Bookkeeping, commercial law, banking and commercial credits, history of commerce, commercial geography, business practice, stenography, typewriting.

University of Kansas, Lawrence, Kans.—Law of contracts, history of commerce, commercial geography, financial history of United States, economic resources and activities of European countries, corporate finance, transportation, labor problems, accounting, social and economic statistics, banking, building materials, law of insurance and agency, insurance.

Kansas Christian College, Lincoln, Kans.—Bookkeeping, business forms, commercial law, banking, typewriting.

Bethany College, Lindsborg, Kans.—Bookkeeping, banking, commercial law, commercial arithmetic, stenography, typewriting.

Ottawa University, Ottawa, Kans.—Bookkeeping, business practice, commercial law, commercial arithmetic, stenography, typewriting.

St. Mary's College, St. Marys, Kans.—Bookkeeping, banking, commercial arithmetic, commercial law, stenography, typewriting.

Kansas Wesleyan University, Salina, Kans.—Bookkeeping, business practice, commercial law, commercial arithmetic, business forms, stenography, typewriting.

Cooper College, Sterling, Kans.—Bookkeeping, business practice, commercial law, stenography, typewriting.

Friends University, Wichita, Kans.—Bookkeeping, commercial arithmetic, commercial law, business practice, stenography, typewriting.

St. John's Lutheran College, Winfield, Kans.—Bookkeeping, business practice, commercial arithmetic, commercial law, stenography, typewriting.

Southwest Kansas College, Winfield, Kans.—Bookkeeping, business practice, commercial arithmetic, commercial law, stenography, typewriting.

Berea College, Berea, Ky.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, stenography.

Kentucky University, Lexington, Ky.—Bookkeeping, banking, commercial arithmetic, commercial law, stenography, typewriting.

Bethel College, Russellville, Ky.—Bookkeeping, business methods, stenography, typewriting.

St. Mary's College, St. Marys, Ky.—Bookkeeping, stenography, typewriting.

Kentucky Wesleyan College, Winchester, Ky.—Bookkeeping, stenography, typewriting.

Louisiana State University, Baton Rouge, La.—Commercial geography, bookkeeping, commercial arithmetic, stenography, typewriting, sociology, economic factors and principles, banking, corporate economics, public finance, law of contracts, private corporations, civil law, American government.

Jefferson College, Convent, La.—Bookkeeping, commercial arithmetic, business forms, business practice, commercial law, stenography, typewriting.

Centenary College, Jackson, La.—Bookkeeping, commercial arithmetic, commercial law, business forms, business practice, banking, accounting, railroading, Spanish, stenography, typewriting, international law.

College of the Immaculate Conception, New Orleans, La.—Bookkeeping, stenography, typewriting.

Tulane University of Louisiana, New Orleans, La.—Commercial geography, transportation.

Rock Hill College, Ellicott City, Md.—Bookkeeping, stenography, typewriting.

Mt. St. Mary's College, Emmitsburg, Md.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Harvard University, Cambridge, Mass.—Statistics, transportation, banking, labor, economics of corporations, international trade, commercial crises and cycles of trade, principles of accounting, industrial relations, commercial law, economics of agriculture, insurance, corporation finance.

Albion College, Albion, Mich.—Bookkeeping, business practice, commercial arithmetic, commercial law, commercial geography, stenography, typewriting, banking, and finance.

Alma College, Alma, Mich.—Bookkeeping, business practice, commercial arithmetic, commercial law, accounting, banking, stenography, typewriting.

University of Michigan, Ann Arbor, Mich.—Political economy, social and industrial reforms, corporations, principles of industry, resources and extractive industries of the United States, distributive industries of the United States, wholesale trade, commercial law, insurance, theory of annuities and insurance, development of industrial society, finance, transportation, banking, manufactures of the United States, retail trade, technic of foreign trade, business organization and accounting, mathematics of insurance and statistics, seminary in commerce.

St. John's University, Collegeville, Minn.—Bookkeeping, commercial arithmetic, commercial law, business forms, commercial geography, political economy, civil government.

St. Olaf College, Northfield, Minn.—Bookkeeping, commercial law.

Macalester College, St. Paul, Minn.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, stenography, typewriting.

Gustavus Adolphus College, St. Peter, Minn.—Bookkeeping, business practice, commercial arithmetic, commercial geography, business ethics, commercial law, stenography, typewriting, political economy, history of commerce.

Parker College, Winnebago, Minn.—Bookkeeping, commercial arithmetic, business forms, commercial law, commercial geography, stenography, typewriting.

Rust University, Holly Springs, Miss.—Bookkeeping, commercial arithmetic, commercial law, business forms.

Alcorn Agricultural and Mechanical College, Westside, Miss.—Bookkeeping, commercial law.

Southwest Baptist College, Bolivar, Mo.—Bookkeeping, stenography, typewriting.

Pike College, Bowling Green, Mo.—Bookkeeping, business forms, commercial arithmetic, commercial geography, business practice, commercial law, stenography, typewriting.

Missouri Wesleyan College, Cameron, Mo.—Bookkeeping, commercial arithmetic, commercial law, banking, stenography, typewriting.

Christian University, Canton, Mo.—Bookkeeping, business practice, banking, commercial law, stenography, typewriting.

University of Missouri, Columbia, Mo.—Agricultural economics, economic geography of the United States, banking, tariff history of the United States, railway transportation, history of commerce, commercial law.

Westminster College, Fulton, Mo.—Bookkeeping, commercial law, stenography, typewriting.

La Grange College, La Grange, Mo.—Bookkeeping, commercial law, stenography, typewriting.

William Jewell College, Liberty, Mo.—Bookkeeping, stenography, typewriting.

Christian Brothers College, St. Louis, Mo.—Bookkeeping, commercial law, stenography, typewriting.

St. Louis University, St. Louis, Mo.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, stenography, typewriting.

Tarkio College, Tarkio, Mo.—Bookkeeping, business practice, commercial arithmetic, commercial law, commercial geography, stenography, typewriting, business forms, corporation accounting and finance.

Montana College of Agriculture and Mechanic Arts, Bozeman, Mont.—Bookkeeping, stenography, typewriting, commercial arithmetic, commercial law.

Bellevue College, Bellevue, Nebr.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, stenography, typewriting.

Cotner University, Bethany, Nebr.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Union College, College View, Nebr.—Bookkeeping, stenography, typewriting.

Doane College, Crete, Nebr.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Grand Island College, Grand Island, Nebr.—Bookkeeping, commercial law, commercial arithmetic, stenography, typewriting.

Nebraska Wesleyan University, University Place, Nebr.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

York College, York, Nebr.—Bookkeeping, business practice, commercial law, stenography, typewriting.

Nevada State University.—Bookkeeping, commercial law, stenography, typewriting.

Dartmouth College, Hanover, N. H.—History and theory of money, credit, and banking, corporations, resources and industries of the United States, commercial history and policy, development of economic thought, theory and practice of accounts, public finance, transportation, labor, statistics, present day economic theory, commercial mathematics, modern east Asia, theory and practice of accounts and audit, cost systems, practical banking, domestic and foreign exchange, money markets and speculation, corporation finance and investments, investment values, foreign commerce of the United States, commercial geography of undeveloped countries, tropical American trade, mechanism of trade, relation of science to business (chemistry, biology, physics), relation of the employer to labor, railroad service, railroad operation and administration (from the accountant's standpoint), economics of insurance, mathematics of insurance, practical workings of insurance, corporations and corporate administration, bank and railroad and steamship administration, business management, plant construction, commercial law, diplomacy.

St. Anselm's College, Manchester, N. H.—Bookkeeping, commercial law, stenography, typewriting.

St. Benedict's College, Newark, N. J.—Bookkeeping, commercial law.

Seton Hall College, South Orange, N. J.—Bookkeeping, commercial law, stenography, typewriting.

University of New Mexico, Albuquerque, N. Mex.—Bookkeeping, stenography, typewriting.

New Mexico College of Agriculture and Mechanic Arts, Mesilla Park, N. Mex.—Bookkeeping, business forms, commercial arithmetic, stenography, typewriting.

St. Bonaventure's College, Allegany, N. Y.—Bookkeeping, commercial law, stenography, typewriting.

St. Francis College, Brooklyn, N. Y.—Bookkeeping, commercial law, stenography, typewriting.

St. John's College, Brooklyn, N. Y.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, history of commerce, stenography, typewriting.

Columbia University, New York, N. Y.—Commerce and commercial policy, money and banking, taxation and finance, labor, trusts, fiscal and industrial history of the United States, railroads, practical economic problems.

Manhattan College, New York, N. Y.—Bookkeeping, commercial arithmetic, business practice, commercial law, commercial geography, history of commerce, stenography, typewriting.

New York University, New York, N. Y.—Accounting practice, accounting procedure, theory and practice of cost accounts, philosophy of accounts, auditing, accounting principles, accounting of executors and trustees, investment accounts, special accounts, political economy, practical economic problems, business organization and practice, commercial geography and history of commerce, commerce of the United States, domestic commerce and transportation, raw materials of industry, industrial values, industrial and commercial history of the United States, practical finance, practical banking, money and credit, theory and history of banking, foreign exchange and the money market, investment and speculation, panics and depressions, corporation and trust finance, financial history of the United States, law of contracts, agency and elementary law, sales and mortgages, partnerships and corporations, bills and notes, assignees and receivers, wills, administration and bankruptcy, insurance law and practice.

Niagara University, Niagara University, N. Y.—Bookkeeping, commercial law, stenography, typewriting.

St. Mary's College, Belmont, N. C.—Bookkeeping, commercial law, stenography, typewriting.

Biddle University, Charlotte, N. C.—Bookkeeping, stenography, typewriting.

Elon College, Elon College, N. C.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Lenoir College, Hickory, N. C.—Bookkeeping, stenography, typewriting.

North Dakota Agricultural College, Agricultural College, N. Dak.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Fargo College, Fargo, N. Dak.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

University of North Dakota, University, N. Dak.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, stenography, typewriting.

Red River Valley University, Wahpeton, N. Dak.—Bookkeeping, business practice, commercial arithmetic, commercial law, commercial geography, stenography, typewriting.

Mount Union College, Alliance, Ohio.—Bookkeeping, commercial law, commercial arithmetic, business practice, stenography, typewriting, commercial geography.

Ohio University, Athens, Ohio.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, stenography, typewriting, money, and banking.

Baldwin University, Berea, Ohio.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, history of commerce, stenography, typewriting.

St. Xavier College, Cincinnati, Ohio.—Bookkeeping, commercial law, commercial arithmetic, stenography, typewriting.

Ohio State University, Columbus, Ohio.—History of industrial society, industrial and financial history of the United States, transportation, economic geography, economic geography of the United States, distribution of products, credit and banking, history and geography of commerce, theory and technique of commerce, art of commerce, business laws and forms, corporation problems.

St. Marys Institute, Dayton, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Defiance College, Defiance, Ohio.—Bookkeeping, commercial law, stenography, typewriting.

Ohio Wesleyan University, Delaware, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Findlay College, Findlay, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Hiram College, Hiram, Ohio.—Bookkeeping, commercial law, stenography, typewriting.

Marietta College, Marietta, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Franklin College, New Athens, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Scio College, Scio, Ohio.—Bookkeeping, commercial arithmetic, commercial law, business forms, stenography, typewriting.

Heidelberg University, Tiffin, Ohio.—Bookkeeping, commercial law, commercial arithmetic, business practice, business forms, stenography, typewriting.

Otterbein University, Westerville, Ohio.—Bookkeeping, commercial law, stenography, typewriting.

West Lafayette College, West Lafayette, Ohio.—Bookkeeping, commercial arithmetic, commercial law, business practice, stenography, typewriting.

Wilberforce University, Wilberforce, Ohio.—Bookkeeping, commercial arithmetic, history of banking, finance, practical banking, commercial geography, commercial and industrial history, commercial law, commercial technology, international law, political economy, stenography, typewriting.

University of Wooster, Wooster, Ohio.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

University of Oklahoma, Norman, Okla.—Economic history of England and the United States, money and banking, industrial combinations, labor problems, economic geography, transportation, business law, insurance, economic statistics, business administration.

Oklahoma Agricultural and Mechanical College, Stillwater, Okla.—Bookkeeping, commercial law, business forms, stenography, typewriting.

Albany College, Albany, Oreg.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, business practice, stenography, typewriting.

Oregon Agricultural College, Corvallis, Oreg.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

Dallas College, Dallas, Oreg.—Bookkeeping, commercial arithmetic, commercial law.

McMinnville College, McMinnville, Oreg.—Bookkeeping, commercial arithmetic, commercial law, business practice, political economy, business forms, stenography, typewriting.

Philomath College, Philomath, Oreg.—Bookkeeping, commercial arithmetic, commercial geography, commercial law, business practice, stenography, typewriting.

St. Vincent College, Beatty, Pa.—Bookkeeping, commercial law, political economy.

Grove City College, Grove City, Pa.—Bookkeeping, commercial arithmetic, business practice, commercial law, stenography, typewriting.

Juniata College, Huntingdon, Pa.—Bookkeeping, commercial arithmetic, commercial law, business practice, stenography, typewriting.

Central High School, Philadelphia, Pa.—Raw materials of commerce (animal, vegetable, and mineral products), business forms, business practice, commercial geography, commercial arithmetic, bookkeeping, stenography, typewriting, history of commerce, transportation, banking and finance, ethics of business, commercial law.

La Salle College, Philadelphia, Pa.—Bookkeeping, commercial law, commercial geography, stenography, typewriting.

Temple College, Philadelphia, Pa.—Bookkeeping, commercial arithmetic, commercial law, commercial geography, business forms, business ethics, political economy, stenography, typewriting.

University of Pennsylvania, Philadelphia, Pa.—Commercial and economic geography, American commerce and commercial relations, commercial policy, transportation, railway rates and traffic, organization of international commerce, stock and produce exchanges, tariff history of the United States, accounting, industrial processes, industrial management, marketing of products, business law, cost accounts, life insurance, fire, marine, and fidelity insurance, the law and practice of insurance, investments, practical banking, money, credit, and foreign exchange, corporation finance, public finance, real estate.

Holy Ghost College, Pittsburg, Pa.—Bookkeeping, commercial arithmetic, business forms, business practice, commercial law, political economy, stenography, typewriting.

Susquehanna University, Selinsgrove, Pa.—Bookkeeping, banking, stenography, typewriting, commercial law.

Volant College, Volant, Pa.—Bookkeeping, stenography, typewriting.

Brown University, Providence, R. I.—Money and banking, public finance, labor movement, industrial corporations, tariff, industrial history of England and United States, insurance.

Presbyterian College of South Carolina, Clinton, S. C.—Bookkeeping, commercial arithmetic, commercial law.

South Dakota Agricultural College, Brookings, S. Dak.—Bookkeeping, commercial law, commerce, economics, commercial arithmetic, stenography, typewriting.

Huron College, Huron, S. Dak.—Bookkeeping, business practice, commercial law, commercial arithmetic, stenography, typewriting.

Dakota Wesleyan University, Mitchell, S. Dak.—Bookkeeping, history of commerce, commercial geography, industrial history, business law, modern industries, modern business methods, commercial arithmetic, stenography, typewriting.

South Dakota School of Mines, Rapid City, S. Dak.—Bookkeeping, commercial geography, commercial law, products and fabrics, stenography, typewriting.

Redfield College, Redfield, S. Dak.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting.

University of South Dakota, Vermilion, S. Dak.—Bookkeeping, commercial and economic geography, business practice, transportation, commercial law, American commerce and commercial relations, economics of agriculture, corporation accounting, insurance, finance, corporations, banking.

Carson and Newman College, Jefferson City, Tenn.—Bookkeeping, business practice, commercial law, stenography, typewriting, banking.

Christian Brothers College, Memphis, Tenn.—Bookkeeping, industrial products, commercial geography, commercial arithmetic, stenography, typewriting.

Milligan College, Milligan, Tenn.—Bookkeeping, commercial law, stenography, typewriting.

Sweetwater Military College, Sweetwater, Tenn.—Bookkeeping, commercial law, commercial geography, stenography, typewriting.

St. Edward's College, Austin, Tex.—Bookkeeping, business practice, commercial law, commercial arithmetic, stenography, typewriting.

University of Texas, Austin, Tex.—History of industry and commerce in the United States, money and banking, labor problems, monopolies and trusts, transportation, international trade, commercial geography, modern business methods, theory and method of statistics, elementary American law.

Howard Payne College, Brownwood, Tex.—Bookkeeping, commercial law, stenography, typewriting.

Fort Worth University, Fort Worth, Tex.—Bookkeeping, commercial arithmetic, business forms, business practice, commercial law, stenography, typewriting.

Polytechnic College, Fort Worth, Tex.—Bookkeeping, commercial law, commercial geography, business practice, stenography, typewriting.

Burleson College, Greenville, Tex.—Bookkeeping, commercial arithmetic, commercial law, stenography, typewriting, business forms.

Texas Christian University, North Waco, Tex.—Bookkeeping, business practice, commercial arithmetic, commercial law, stenography, typewriting.

Trinity University, Wazahachie, Tex.—Bookkeeping, commercial arithmetic, commercial law, business practice, history of commerce, materials of commerce, banking, auditing, stenography, typewriting.

Brigham Young College, Logan, Utah.—Bookkeeping, banking, commercial arithmetic, commercial law, commerce, transportation, stenography, typewriting.

University of Utah, Salt Lake City, Utah.—Industrial history of Europe, economic history of American colonies, American industry and commerce, industrial problems, corporation finance, American public finance, transportation, banking, business law.

University of Vermont, Burlington, Vt.—General economics and taxation, money, banking, foreign exchange, railroad economics and corporation finance, economic history of the United States, economic history of Europe, industrial organization and resources of the United States and of the other leading countries, accounting, commercial mathematics, stenography, typewriting, commercial law.

Bridgewater College, Bridgewater, Va.—Bookkeeping, commercial arithmetic, commercial law, business practice, commercial geography, stenography, typewriting.

Fredericksburg College, Fredericksburg, Va.—Bookkeeping, commercial law, stenography, typewriting.

Hampden-Sidney College, Hampden Sidney, Va.—Bookkeeping, commercial arithmetic.

Roanoke College, Salem, Va.—Bookkeeping, business practice, banking, commercial arithmetic, commercial law, stenography, typewriting.

Vashon College, Burton, Wash.—Bookkeeping, commercial geography, commercial law, business practice, stenography, typewriting.

State College of Washington, Pullman, Wash.—Bookkeeping, commercial law, industrial history of England and United States, commercial arithmetic, commercial geography, stenography, typewriting.

Gonzaga College, Spokane, Wash.—Bookkeeping, commercial law, stenography, typewriting.

Morris Harvey College, Barboursville, W. Va.—Bookkeeping, commercial geography, history of commerce, commercial law, commercial arithmetic, stenography, typewriting.

Bethany College, Bethany, W. Va.—Bookkeeping, commercial arithmetic, business forms, business practice, commercial law, stenography, typewriting.

Wesleyan University of West Virginia, Buckhannon, W. Va.—Bookkeeping, commercial law, commercial geography, stenography, typewriting.

West Virginia University, Morgantown, W. Va.—Bookkeeping, commercial law, commercial geography, history of commerce, stenography, typewriting.

Lawrence University, Appleton, Wis.—Bookkeeping, commercial law, stenography, typewriting.

University of Wisconsin, Madison, Wis.—Public finance, money and banking, economic geography, business administration, commercial law, labor legislation, elements of agricultural economics, historical and comparative agriculture, agricultural industries, manufacturing industries, social statistics, economic statistics, financial history of the United States, corporation finance and securities, transportation and communication, special problems in transportation, foreign systems of railways, insurance.

Marquette College, Milwaukee, Wis.—Bookkeeping, business practice, commercial law, commercial arithmetic, stenography, typewriting.

University of Wyoming, Laramie, Wyo.—Bookkeeping, commercial geography, commercial law, stenography, typewriting.

STATE LAWS RELATING TO HUMANE EDUCATION.

CALIFORNIA.

Statutory School Studies.—SEC. 1665. Instruction must be given in the following branches in the several grades in which they may be required, viz: * * * humane education: *Provided*, That instruction in * * * humane education * * * may be oral, no text-books on these subjects being required to be purchased by the pupils: *Provided further*, That county boards of education may, in districts having less than 100 census children, confine the pupils to the studies * * * [humane education not in the list] until they have a practical knowledge of these subjects.—*School Law of California*, 1903, p. 38.

COLORADO.

SEC. 78. * * * School boards shall * * * cause to be given in each school week two lessons of not less than ten minutes' duration each on the subject of humane treatment to animals.—*Colorado School Law*, 1903, p. 63.

SUGGESTIONS OF STATE SUPT. HELEN L. GRENFELL REGARDING HUMANE EDUCATION.

* * * In order to make this line of instruction effective, it is necessary that a teacher should seize every opportunity to inculcate humane lessons, and there is a never-ceasing opportunity through the every-day life of the child and the teacher. Abstract lessons are ineffective for the young in all ethical lines, and the teacher should therefore lead the child to observe and report his own experiences, and should, in return, through interesting stories of conditions actually existing, illustrative of cruelty through ignorance as well as maliciousness, train him to a thorough appreciation of his duty toward animals.

* * * The underlying principle in connection with this work is not that we are trying to prevent, simply, the suffering of animals, but the moral degradation of the person who causes the suffering.

The work of humane education may be correlated with the usual school studies. It naturally is joined with work in literature, reading, nature study, language, and ethics. While this entire line of work is one in which the originality of the teacher may especially be shown, so far as methods and accomplishments are concerned, the following suggestions are made:

Have pupils recite memory gems or read poems by standard authors touching upon the subject. Nearly every great author offers examples. * * *

The teacher may read *Black Beauty*, *Beautiful Joe*, or similar stories to the school, or from especial publications in this line. * * *

Through nature study an excellent opportunity is given to teach habits of kindness to animals, and the teacher should lead the child to observe, write about, and talk about common animals, to notice their habits, and to learn to care for them properly. * * *

In connection with art, instructive pictures of animals by standard artists may be shown, and will invariably interest the child. Those of Rosa Bonheur and Landseer are among the many.

If mothers' meetings are held in the district the subject should be brought up for discussion, and the cooperation of those attending should be secured, since the home sympathy and influence is most important in the work.

Some person of prominence may be invited to address the pupils on the humane treatment of animals, in connection with some special programme, or as a distinct lecture. * * *

MAINE.

* * * And it also shall be the duty of all teachers in the public schools of this State to devote not less than ten minutes of each week of the school term to teaching to the children under their charge the principles of kindness to birds and animals.—*School Laws of Maine*, 1901, Sec. 97.

MONTANA.

SEC. 1861. All common schools shall be taught in the English language; and instructions shall be given in the following branches, viz: * * * Also a system of humane treatment of animals as embodied in the laws of Montana. Such instruction to consist of at least two (2) lessons of not less than ten minutes each per week. The principal or teacher in every school shall certify in each of his or her reports that such instruction has been given in the school under his or her control.—*Political Code*, Art. 8, Chap. 6, as amended in 1903.

OKLAHOMA.

AN ACT to provide for moral and humane education in the public schools of the Territory of Oklahoma.

Be it enacted by the legislative assembly of the Territory of Oklahoma.

SECTION 1. That in each and every public school within the Territory of Oklahoma it shall be the duty of each and every teacher to teach morality in the broadest meaning of the word, for the purpose of elevating and refining the character of school children up to the highest plane of life; that they may know how to conduct themselves as social beings in relation to each other, as respects right and wrong and rectitude of life, and thereby lessen wrong-doing and crime.

SECTION 2. That in each and every public school within the Territory of Oklahoma, in addition to the other branches of study now prescribed, not less than one-half hour of each week, during the whole of each term of school, shall be devoted to teaching the school children attending said school kindness to and humane treatment and protection of dumb animals and birds; their lives, habits, and usefulness, and the important part they are intended to fulfill in the economy of nature, and such studies on the subject as the Board of Public Education may adopt.

SECTION 3. That no experiments upon any living creature shall be permitted in any public school within the Territory of Oklahoma.

SECTION 4. That it shall be the duty of the superintendent of public instruction for the Territory of Oklahoma, the superintendent of public instruction of each county, the superintendent of public schools of each city, and the principal of each and every public school in said Territory, to see that the provisions of sections one, two, and three of this act are strictly complied with in the public schools under his supervision.

SECTION 5. That no teacher in the public schools of the Territory of Oklahoma shall be entitled to receive any portion of the public school moneys as compensation for services unless such teacher shall have complied with the provisions of this act.

SECTION 6. All acts or parts of acts in conflict herewith are hereby repealed.

SECTION 7. This act shall take effect and be in force from and after its passage and approval.

Approved, March 4, 1905.

PENNSYLVANIA.

AN ACT To provide a system of humane education, to include kind treatment of birds and animals, in our public schools.

SECTION 1. *Be it enacted, &c.,* That a system of humane education, which shall include kind treatment of birds and animals, shall be included in the branches of study now required by law to be taught in the common schools; such instruction to be given to all pupils, up to and including the fourth grade, of the public schools of the Commonwealth, and to consist of not more than half an hour each week during the whole term of the school.

SECTION 2. That no experiment upon any living creature, to demonstrate in physiology, shall be permitted in any public school of the State.

CIV STATE LAWS RELATING TO HUMANE EDUCATION.

SECTION 3. The principal or teacher in every school shall certify, in each of his or her monthly reports to the school board, that such instruction has been given in the school under his or her control.

SECTION 4. This act shall take effect immediately.

APPROVED—The 27th day of March, A. D. 1905.

SOUTH DAKOTA.

AN ACT Pertaining to the humane treatment of animals.

Be it enacted by the legislature of the State of South Dakota:

SECTION 1. That there shall be taught in the public schools of this State, in addition to other branches of study now prescribed, a system of humane treatment of animals.

SECTION 2. Each school supported wholly or in part by the public funds of this State, or of any county or city in this State, shall instruct all scholars in the laws of this State, as embodied in the penal code or other laws pertaining to the humane treatment of animals, and such studies on the subject as the board of education may adopt, such instruction to consist of not less than two lessons of ten minutes each during each week of the school year. And no experiment upon live animals to demonstrate facts in physiology shall be permitted in any school in this State.

SECTION 3. This act shall take effect and be in force immediately after its passage.

TEXAS.

SECTION 100. * * * Suitable instruction shall be given in the primary grades [of all public schools] once each week regarding kindness to animals of the brute creation and the protection of birds and their nests and eggs.—*General Laws of Texas*, 1905, Chap. 124.

WASHINGTON.

SEC. 65. * * * Attention must be given during the entire course to the cultivation of manners, to the laws of health, physical exercise, ventilation, and temperature of the schoolroom, and not less than ten minutes each week must be devoted to the systematic teaching of kindness to not only our domestic animals, but to all living creatures.—*School Laws of Washington*, 1901, p. 48.

WYOMING.

AN ACT providing that a system of humane treatment of animals shall be taught in the public schools of Wyoming.

Be it enacted by the legislature of the State of Wyoming:

SECTION 1. That there shall be taught in the public schools of Wyoming, in addition to the other branches of study now prescribed, a system of humane treatment of animals, as embodied in the laws of Wyoming; such instruction to consist of not less than two lessons of ten minutes each per week. The principal or teacher of every school shall certify in his or her reports that such instruction has been given in the school under his or her control.

SECTION 2. This act shall take effect and be in force from and after its passage.

[Approved February 6, 1901.]

CHAPTER I.

EDUCATION IN CANADA, AUSTRALIA, AND NEW ZEALAND.

CANADA.

Dominion of Canada, comprising seven provinces, with an extent of 3,653,946 square miles and a population estimated at 5,371,051 in 1901.

PREVIOUS ARTICLES ON EDUCATION IN CANADA IN THE COMMISSIONER'S REPORTS.

- "Education in Ontario," Report 1892-93, Vol. 1, Chapter VI; "Notes on education at the Columbian Exposition," *ibid.*, Chapter X, pages 1213-1215; "Manitoba school question," Report 1894-95, Vol. 1, Chapter VII.
- "Current and historical survey of the systems of education in the several provinces," Report 1897-98, Vol. 1, Chapter IV.
- "Education in Canada: Outline of the public systems of education with current statistics; Industrial and technical education; Historic foundations of the Ontario system," Report 1898-99, Vol. 2, Chapter XXIX.
- "Education in Canada: Detailed accounts of the systems of education in the several provinces, with comparative statistics; Table of higher institutions," Report 1902, Vol. 1, Chapter VIII.

TOPICAL OUTLINE.

Outline of the Canadian systems of public instruction. Current statistics. Teachers' salaries. Statistics of colleges and universities.

By the British North American act of 1867 the right to legislate on matters respecting education was left to the governments of the four provinces (Ontario, Quebec, Nova Scotia, and New Brunswick), which were then united under the general name of Dominion of Canada. The same right has been assured also to the provinces that have since entered the confederation (Prince Edward Island, Manitoba, British Columbia, Northwest Territories).

Prior, however, to the federation of the provinces, education had become a matter of general interest. Ontario, "the core of the confederation," had at the time of its adoption a well-organized system of public schools. Quebec had brought its parochial schools under public supervision and the smaller maritime provinces had proved their interest in the cause both by legislation and by grants for schools from public funds.

From the beginning two forces were at work directing the educational activities of the people. Both the English and French settlers had brought with them traditional respect for parochial schools and for ecclesiastical control of

education; but the English settlers were also deeply imbued with those ideas that were making for the supremacy of civil authorities in all secular affairs, and the conditions of the new country favored the growth of this tendency.

The first system of public education organized in the provinces, that of Ontario, was distinctively a system under public or government control, and as such has been the model followed more or less closely by all the other provinces excepting Quebec.

The Ontario school law of 1843, the basis of the system, embodied features drawn from the school systems of New England and New York, but it differed from these especially by the larger provision for centralized control.

The minister of public instruction in Ontario is more than the executive head of the system. As a member of the legislature he initiates and largely directs school legislation, while his judicial functions and powers of appointment give great weight to the policies he advocates. No other province has reposed equal authority in the chief officer of education, but all have sought to secure uniformity of school provision and educational standards by means of centralized government control.

In Quebec the schools are sectarian; that is, they are distinctively either Roman Catholic or Protestant schools. The former are under ecclesiastical control, which for this purpose is organized in accordance with the provisions of the school laws; the Protestant schools are in like manner under Protestant control. In Ontario and the Northwest Territories provision is made for separate schools for Protestants and for Catholics, where desired, and the supporters of these separate schools are exempt from the payment of local taxes for the support of the public schools. The separate schools are under government inspection and in general are under the same regulations as the public schools.

The public elementary schools are free schools, excepting in Quebec, where fees are charged which may not exceed 50 cents a month nor be less than 5 cents a month. In the model schools and academies of this province, which correspond to the grammar and high schools of our own States, the fees may be higher.^a In the high schools of Ontario fees are charged, but may be and often are remitted at the discretion of the school authorities. With these exceptions the public schools of the several provinces are free, their support being derived from provincial grants and local (municipal) appropriations and school taxes.

The mode of apportioning the legislative grant among the school districts differs in the different provinces, but in all there is apparent the purpose to make the provincial appropriation a means of stimulating rather than of lessening local effort in behalf of the schools.

In Ontario the legislative grant is apportioned to the schools on the basis of average attendance in each, respectively. In Quebec the legislative grant is

^a The following extract from a letter from the department of public instruction, Quebec (dated June 30, 1904) throws light upon certain peculiarities of school classification and administration in that province:

The terms "model school" and "academy," as used in this province, are likely to be misleading to strangers, and there is now a proposal to change our nomenclature so as to remove the difficulties which now exist in this direction.

Our public schools are "elementary," covering the first four years' work; "model," covering the fifth, sixth, and seventh years, and "academy," covering the eighth, ninth, and tenth years. The work is continuous, so that the last year of one grade qualifies for the first year of the next.

Inasmuch as many school municipalities defray the expenses of schools of all grades from a general fund, it is impossible to know exactly the total cost of elementary education as distinguished from secondary education.

Our clerk of statistics reports that the elementary schools receive approximately 90 per cent of the total contributions for school purposes (in 1903 reported to be \$3,471,989), and that the secondary schools receive the remaining 10 per cent.

apportioned to the several school municipalities (areas for local school administration) in proportion to their respective populations upon proof that they have complied with the law as to the maintenance of schools and the qualifications and remuneration of teachers. Special arrangements are made in the case of very poor municipalities. In Nova Scotia the legislative grant for public schools is a fixed sum (\$190,000 annually), divided between the legally qualified teachers in conjoined proportion to the number of "authorized days taught" and to the class of license held by the teacher.

In Manitoba each municipality ^a is required to appropriate a specified amount (\$20 for each teacher employed for each month the school is kept open) in addition to a variable amount, depending upon the current expenditure for the schools.

The need of some regulation proportioning the provincial grant to the amount raised locally is recognized in New Brunswick, where many districts seem content to leave their schools to the meager provision from the legislative grant, although fully able to bear a part in their financial support.

In all the provinces the public school systems include secondary schools corresponding to the high schools of our own country. These high schools have generally an extended curriculum and prepare students for matriculation in the universities.

The history of higher education in the older Canadian provinces antedates that of public provision for elementary schools. As early as 1798 an appropriation of 500,000 acres of land was made for the establishment of a university and grammar or preparatory schools in Toronto, but the charter for the university was not secured until 1827. Laval University was founded by the Seminary of Quebec (ecclesiastical organization) in 1852 and secured a royal charter the same year.

The influence of these and of kindred institutions may be traced throughout the subsequent history of education in the Dominion. They have aided materially in maintaining a high standard of secondary education. The high schools of Ontario prepare students for the matriculation examination at the university, and the precedent thus set has been followed in the other provinces.

Everywhere the disposition is manifest to keep an open road from the public schools to the universities and to do away entirely with class distinctions in education.

The following tables present in summaries the principal statistics of the public schools in the several provinces. For convenience of reference the educational statistics are preceded by a table of populations in which the population is classified as Roman Catholic and Protestant, a distinction of much importance on account of its bearing upon the provision for separate schools, as already explained.

^a For purposes of civil administration a municipal organization is adopted in Ontario, Manitoba, and British Columbia. This organization comprises: "(a) The townships, being rural districts of an area of 8 or 10 square miles; (b) villages with a population of over 750; (c) towns with a population of over 2,000; such of these as are comprised within a large district, called a county, constitute (d) the county municipality; (e) cities are established from the growth of towns when their population exceeds 15,000." (Canada Statistical Yearbook.)

EDUCATION REPORT, 1904.

Population of Dominion of Canada, 1901.

Provinces.	Roman Catholics.	Other denominations.	Grand total.	Ages for school attendance.	Compulsory school ages.	Age and number of registered pupils.			School population.
						Under 5 years.	5 to 21 years.	Above 21 years.	
Ontario	390,355	1,792,592	2,182,947	5 to 21	8 to 14	1,111	461,258	125	580,105
Quebec	1,429,186	219,712	1,648,898	5 to 16	5 to 16	-----	6308,870	66,011	379,005
Nova Scotia	129,578	329,996	459,574	5 to 15	7 to 12	2,135	88,430	7,845	-----
New Brunswick	125,698	205,422	331,120	5 to 15	5 to 15	187	56,485	3,748	-----
Manitoba	35,622	219,325	254,947	5 to 21	5 to 21	90	50,265	105	63,881
British Columbia	34,227	144,430	178,657	5 to 16	7 to 12	-----	-----	-----	-----
Prince Edward Island	45,796	57,463	103,259	-----	8 to 13	-----	-----	-----	-----
Northwest Territories	30,069	123,851	158,940	5 to 16	7 to 12	-----	-----	-----	-----
Unorganized Territories	8,446	44,263	52,709	-----	(f)	-----	-----	-----	-----
Canada	2,228,997	3,142,054	5,371,051	-----	-----	-----	-----	-----	-----

a Full-term law of 1891.

c Above 16 years.

e Above 15 years.

b 5 to 16 years.

d 5 to 15 years.

f 16 weeks in each year—8 consecutive.

Enrollment in public schools, elementary and high.

Provinces.	Date of school statistics.	Public schools (chiefly elementary).				
		Enrollment.			Average attendance.	
		Male.	Female.	Total.	Total.	Ratio to enrollment.
Ontario	1902	{ 232,880 ⁽⁴⁶⁶⁾ 221,208 }		454,554	261,727	57.5
Quebec	1902-3	158,987	167,196	326,183	243,123	74
Nova Scotia	1902-3	49,789	48,979	98,768	55,213	56
New Brunswick	1903	-----	-----	65,927	34,873	53.04
Manitoba	1903	-----	-----	57,409	36,479	63.54
British Columbia	1902-3	12,559	11,940	24,499	16,357	66.7
Prince Edward Island	1903	10,845	9,111	19,956	12,112	60.69
Northwest Territories	1903	-----	-----	33,191	-----	-----

Expenditures for public schools.

Provinces.	Year.	Teachers' salaries.	Sites, buildings, and furnishings.	Fuel.	Care of school-houses.	Other purposes.	Total.	Per capita of enrollment.	Per capita of population.
Ontario	1902	\$3,198,132	(\$1,540,305)	-----	-----	\$86,723	\$4,825,160	\$10.61	\$2.21
Quebec	-----	-----	-----	-----	-----	-----	3,414,061	10.31	1.28
Nova Scotia	-----	-----	-----	-----	-----	-----	336,458	9.43	2.03
New Brunswick	1903	-----	-----	-----	-----	-----	629,991	9.55	1.90
Manitoba	1903	697,996	214,481	\$128,310	-----	-----	1,509,276	-----	-----
British Columbia	1902-3	-----	-----	-----	-----	-----	604,357	24.66	3.38
Prince Edward Island	1903	120,875	10,771	2,142	-----	22,829	166,617	8.34	1.61
Northwest Territories	1903	-----	-----	-----	-----	-----	213,764	-----	-----

Income—Sources and amounts.

Provinces.	Year.	Legisla- tive grant.	Municipal appropria- tions.	Other local sources.	Total.
Ontario.....	1902	\$383,666	\$3,359,912	\$1,422,924	\$5,766,502
Quebec.....	1902	180,088	1,835,113	1,398,860	3,414,061
Nova Scotia.....	1902-3	263,092	121,016	552,350	936,458
New Brunswick.....	1903	192,735	(469,165)	-----	661,900
Manitoba.....	1903	191,991	796,065	-----	1,588,954
British Columbia.....	1902-3	473,802	130,555	-----	604,357
Prince Edward Island.....	1903	123,919	(42,698)	-----	166,617
Northwest Territories.....	-----	-----	-----	-----	-----

Teachers and salaries.

Provinces.	Number of teachers.			Percentage of male teachers.	Average annual salaries of teachers.	
	Male.	Female.	Total.		Male.	Female.
Ontario.....	2,294	7,073	9,367	24.49	\$436.00	\$313.00
Quebec.....	1,319	9,225	10,552	12.5	a 238.00 to 1,168.00	a 113.00 to 391.00
Nova Scotia.....	441	2,053	2,494	17.68	a 188.00 to 809.00	a 167.00 to 457.00
New Brunswick.....	363	1,495	1,815	20	a 199.77 to 522.86	a 186.30 to 328.81
Manitoba.....	-----	2,094	607	-----	-----	-----
British Columbia.....	-----	572	572	47.9	a 187.87 to 325.80	a 144.29 to 196.28
Prince Edward Island.....	274	298	572	-----	-----	-----
Northwest Territories.....	-----	-----	1,152	-----	-----	-----

a The average salary in these cases is given in the official reports for each class or grade of teachers; the amounts tabulated are the highest and lowest averages given. For full details see pp. 6, 7. By reason of a clerical error the averages given for New Brunswick, Nova Scotia, and Prince Edward Island in the Report of the Commissioner for 1902, page 426, are incorrect.

TEACHERS' SALARIES.

The financial status of the teachers of public elementary schools is just now exciting great attention throughout our country. The moment is therefore opportune for considering the salaries paid in other countries, particularly in those most like our own in their regard for education. The statements which follow in respect to salaries in Canada are taken from the official reports of the several provinces.

Ontario.—The following table shows the present rates of teachers' salaries in Ontario in comparison with the same at stated intervals for a period of thirty years:

Teachers' salaries.

Year.	Highest salary paid.	Average salary.							
		In province.		In counties, etc.		In cities.		In towns.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1867.....	\$1,350	\$346	\$226	\$261	\$189	\$532	\$243	\$464	\$240
1872.....	1,000	360	228	305	213	628	245	507	216
1877.....	1,100	398	264	379	251	735	307	583	269
1882.....	1,100	415	269	385	248	742	331	576	273
1887.....	1,450	425	292	398	271	832	382	619	289
1892.....	1,500	421	297	383	269	894	402	648	298
1897.....	1,550	391	294	347	254	892	425	621	306
1901.....	1,550	421	306	359	262	915	470	649	315
1902.....	1,600	436	313	372	271	935	479	667	317

With respect to the foregoing presentation, the minister of education observes that while the average salaries for teachers in the province are higher for both men and women than at any previous period and while the salaries in the cities and towns are considerably higher, the salaries in the counties, etc., or rural and village sections, are not as high as formerly.

When these salaries are considered in connection with the increased cost of living and of obtaining the necessary qualifications, it will be seen that they are still very low. [Report of the Minister of Education, 1903, p. ix.]

Quebec.—According to the report of the superintendent of public instruction for 1902-3 the average salaries of teachers in the elementary schools are as follows:

Roman Catholic elementary schools:

Average salary of male lay teachers with diplomas—	
In towns	\$340
In the country.....	238
Average salary of female lay teachers with diplomas—	
In towns	\$158
In the country.....	113

Protestant elementary schools:

Average salary of male lay teachers with diplomas—	
In towns.....	1,168
In the country.....	415
Average salary of female lay teachers with diplomas—	
In towns.....	369
In the country.....	153

Roman Catholic model schools and academies:

Average salary of male lay teachers with diplomas—	
In towns.....	602
In the country.....	345
Average salary of female lay teachers with diplomas—	
In towns.....	164
In the country.....	138

Protestant model schools and academies:

Average salary of male lay teachers with diplomas—	
In towns.....	1,054
In the country.....	627
Average salary of female lay teachers with diplomas—	
In towns.....	391
In the country.....	255

[Report of the Superintendent of Public Instruction, 1902-3, tables, pp. x, xi, xii.]

Nova Scotia.—The teachers of public schools in Nova Scotia are divided into four classes, according to the grade of license held. The average salaries and the percentage of teachers in each class are shown in the following table:

Class.	Per cent of total teachers in each class.	Average salaries.	
		Men.	Women.
A	5	\$809	\$457
B	20	438	293
C	37	253	230
D	38	188	167

The superintendent of education states that male teachers are now only about one-fifth of the whole number, the female teachers numbering 2,053 to 441 male teachers. The teachers of Class A form no more than 5 per cent of the teachers of the province. However, 71 of these are male and only 24 female. All these are engaged as a rule in high school work, either in the academies or other high schools, and a few in the superior common schools. [Report of the Superintendent of Education, 1903, tables, pp. xv and xvi, also p. xxii.]

New Brunswick.—The following tabulation shows the average annual salaries of teachers for the year 1903:

Common schools.

Class of teachers.	Average salaries.	
	Men.	Women.
First	\$522.86	\$328.21
Second	291.22	237.34
Third	199.77	186.30

In the superior schools (common schools with advanced classes) the average salary was \$570.96 and in the grammar schools (county high schools) salaries ranged from \$600 to \$2,400. [Report of the Chief Superintendent of Education, 1903, Table VIII, p. A 23, and Table XIII, p. A 35.]

British Columbia.—The report of the superintendent of education for 1902-3 contains a complete list of teachers and salaries, from which it appears that the range of salaries in the schools below the high school grade is from \$40 to \$105 a month. Only one salary is given at the latter figure, and only a small proportion of salaries fall as low as \$40. The usual salary is \$50, \$55, or \$60 a month.

In the high schools the salaries for principals range from \$100 to \$140 a month, and for assistants from \$50 to \$90. [Report 1902-3, pp. xlvii-lx.]

Prince Edward Island.—The classification and average salaries for teachers in Prince Edward Island for 1903 were as follows:

Class of teachers.	Men.	Women.
First	\$325.80	\$196.28
Second	236.43	188.36
Third	187.87	144.29

[Estimated from Table XVIII, Report of the Chief Superintendent of Education, 1903.]

The higher educational institutions of Canada.^a

Name.	Date of foundation.	Endowment.	Value of property owned.	Income.	Approximate number of students.
<i>Universities.</i>					
University of King's College, Windsor, Nova Scotia	1790	\$140,000	\$250,000	\$8,500	25
University of New Brunswick, Fredericton, New Brunswick	1800	b 8,964			134
McGill University, Montreal, Quebec	1821	2,074,504	1,874,937	346,448	1,100
Dalhousie College and University, Halifax, Nova Scotia	1818	420,000	100,000	2,800	350
University of Toronto and University College	1827	3,700,000	2,922,250	200,000	2,125
University of Acadia College, Wolfville, Nova Scotia	1838	241,970	130,000	18,528	113
University of Queen's College, Kingston, Ontario	1841	500,000	200,000	54,000	875
University of Bishop's College, Lennoxville, Quebec	1843	192,918	154,200	16,388	40
University of Ottawa, Ottawa, Ontario	1848		300,000	50,000	500
University of Trinity College, Toronto	1852	490,000	380,000	31,500	140
Laval University, Quebec and Montreal	1852	None.	180,000	None.	c 11,304
University of Mount Allison College, New Brunswick	1862	120,000	150,000	15,000	125
University of Manitoba, Winnipeg	1877	f 150,000	70,000		368
Victoria University, Toronto, Ontario	1836	487,455	464,740	44,013	335
McMaster University, Toronto, Ontario	1887	900,000	250,000	75,000	200
University of St. Joseph's College, St. Joseph, New Brunswick	1864		80,000	25,000	200
<i>Colleges.</i>					
St. Michael's College, Toronto, Ontario	1852	None.	175,000		225
St. Francis-Xavier College, Antigonish, Nova Scotia	1853	50,000	125,000	15,000	175
Knox College, Toronto, Ontario	1844	300,000	200,000	19,000	75
Assumption College, Sandwich, Ontario	1854		110,000	25,000	175
Presbyterian College, Montreal, Quebec	1867	278,000	160,000	22,000	50
Presbyterian College, Halifax, Nova Scotia	1820	165,000	60,000	13,000	25
Wesleyan College, Montreal	1873	110,000	60,000	8,000	43
Wesley College, Winnipeg, Manitoba	1888	75,000	150,000	23,000	200
St. John's College, Winnipeg, Manitoba	1866	186,600	100,000	12,000	50
St. Boniface College, Winnipeg, Manitoba	1818		130,000	15,000	190
Woodstock College, Woodstock, Ontario	1858	200,000	100,000	24,000	135
Wycliffe College, Toronto, Ontario	1877	100,000	80,000	11,000	44
Albert College, Belleville, Ontario	1854		90,000	25,000	325
Stanstead Wesleyan College, Stanstead, Quebec	1872	31,000	99,400	17,500	300
St. Francis College, Richmond, Quebec	1854	15,000	2,900	3,000	110
St. Anne College, Church Point, Nova Scotia	1890	10,000	50,000		100
Halifax Ladies' College and Conservatory of Music, Halifax, Nova Scotia	1887		75,000	30,000	450
Church School for Girls, Windsor, Nova Scotia	1891		71,000	24,000	83
Acadia Seminary, Wolfville, Nova Scotia	1879		50,000	20,000	200
St. Jerome's, Berlin, Ontario	1865	None.	40,000	6,000	92
Montreal Diocesan Theological College	1873	150,000	105,000	10,000	30
Havergal College, Toronto	1894		103,000	56,000	290
Ridley College, St. Catharines	1889		75,000	25,000	100
Bishop Bethune College, Oshawa	1889		15,000	11,000	45
Alma College, St. Thomas	1881		100,000	18,000	160
Upper Canada College, Deer Park	1829		400,000	63,000	285
St. Andrew's College, Toronto	1899		25,000	30,000	250
Congregational College, Montreal	1839	115,000	35,000	10,000	14
Huron College (Divinity), London	1863	55,000	45,000	5,000	18
Manitoba College, Winnipeg	1871	120,000	100,000	26,000	200
Prince of Wales College, Charlottetown	1860				160

^a From statistical yearbook of Canada, 1903.^b Government grant.^c Buildings destroyed by fire December 2, 1903.^d Quebec Seminary, an ecclesiastical organization, defrays all expenses.^e The Quebec branch has 425 students; the remainder are connected with the Montreal branch.^f Acres of land.^g No statement received from the authorities.

The higher educational institutions of Canada—Continued.

Name.	Date of foundation.	Endowment.	Value of property owned.	Income.	Approximate number of students.
<i>Classical colleges—Quebec.^a</i>					
Chicoutimi	1873	\$83,500	<i>b</i> \$95,000	-----	173
Joliette	1846	150,000	<i>b</i> 163,000	-----	538
L'Assomption	1832	145,000	<i>b</i> 145,000	-----	288
Lévis	1853	271,100	<i>b</i> 276,000	-----	592
Montreal:					
Loyola	1896	108,600	<i>b</i> 109,000	-----	184
St. Mary's	1848	445,000	<i>b</i> 445,000	-----	286
St. Sulpice	1767	-----	-----	-----	465
Nicolet	1803	266,000	<i>b</i> 326,000	-----	518
Quebec (Seminary)	1665	-----	-----	-----	538
Rigaud	1850	87,500	<i>b</i> 97,600	-----	306
Rimouski	1862	58,500	<i>b</i> 62,500	-----	136
Ste. Anne de la Pocatière	1829	180,000	<i>b</i> 212,000	-----	367
Saint Hyacinthe	1800	180,000	<i>b</i> 180,000	-----	324
St. Laurent	1847	200,000	<i>b</i> 200,000	-----	513
St. Marie de Monnoir	1853	68,500	<i>b</i> 76,000	-----	227
St. Thérèse	1825	101,670	<i>b</i> 102,270	-----	324
Sherbrooke	1875	220,000	<i>b</i> 226,000	-----	247
Three Rivers	1860	98,500	<i>b</i> 153,000	-----	292
Valleyfield	1893	123,864	<i>b</i> 126,500	-----	256
<i>Ladies' colleges.^c</i>					
Wesleyan Ladies' College, Hamilton, Ontario	1860	-----	80,000	\$17,000	144
Ontario Ladies' College, Whitby, Ontario	1874	-----	132,529	28,023	170
Alma Ladies' College, St. Thomas, Ontario	1881	-----	100,000	18,000	160
Mount Allison Ladies' College, Sackville, New Brunswick	1854	-----	121,000	-----	195
Ottawa Ladies' College, Ottawa, Ontario	1872	-----	50,000	15,500	146
St. Margaret's College, Toronto	1897	-----	30,000	40,000	150
Presbyterian Ladies' College, Toronto	1889	-----	40,000	11,000	110
Mount St. Bernard, Antigonish, Nova Scotia	1883	-----	40,000	-----	100
<i>Academy.</i>					
Mount Allison, Sackville, New Brunswick	1843	-----	32,000	-----	89
<i>Agricultural colleges, etc.</i>					
Ontario Agricultural College, Guelph, Ontario	1874	-----	340,900	^d 18,564	135
Provincial School of Agriculture, Truro, Nova Scotia	1885	-----	-----	^d 1,967	48
School of Practical Science, Toronto, Ontario	1878	-----	-----	39,794	403
School of Agriculture, L'Assomption, Quebec	-----	-----	-----	4,500	24
School of Ste. Anne de la Pocatière, Quebec	1859	-----	-----	4,000	12

^a The classical colleges in Quebec are a combination of school and college, attended by both boys and young men. They confer certain degrees, and are mostly affiliated with Laval University. It not being possible to separate them, the pupils in these colleges are counted twice over, viz, in this table and in the one in the preceding table.

^b Includes value of furniture.

^c There are good ladies' colleges in the Province of Quebec, but the returns of the superintendent of education for the Province of Quebec are so incomplete that no satisfactory analysis can be made.

^d Government grant.

Denominational and private institutions not having degree-conferring powers, 1903.

NOVA SCOTIA.

Name of institution.	Teachers.	Pupils.			Average daily attendance.
		Males.	Females.	Total.	
St. Andrew's School	5	28	—	28	—
The Miss Forbes' School	2	5	16	21	13
Maritime Business College	9	173	160	333	115
Halifax Ladies' College	12	—	130	130	120
Halifax Conservatory of Music	20	66	368	434	—
Harrow House School	3	33	—	33	32
Academy of the Sacred Heart	17	—	97	97	97
Mount St. Vincent Academy	16	—	101	101	100
Collegiate School	4	42	—	42	42
Church School for Girls	12	—	90	90	90
Horton Collegiate Academy	10	86	—	86	84
Acadia Seminary	16	—	172	172	—
Acacia Villa School	6	53	3	56	56
Stella Marie Convent	3	—	92	92	46
St. John Baptist Academy	3	52	67	119	76
Our Lady of Lourdes School	3	54	69	123	100
Total, 1903	141	502	1,365	1,957	971
Total, 1902	112	344	1,141	1,485	730

The following table, giving statistics of illiteracy in Canada in 1891 and 1901, shows the effects of the ever-increasing provision for public education.^a

	Census year.	Illiterates.	Per cent of total population.
Canada	1891	1,449,446	29.99
	1901	1,322,816	24.63
British Columbia	1891	54,198	34.83
	1901	55,902	31.29
Manitoba	1891	43,282	28.58
	1901	67,853	26.58
New Brunswick	1891	98,438	30.64
	1901	87,442	26.41
Nova Scotia	1891	119,675	26.57
	1901	110,425	24.03
Ontario	1891	454,253	21.48
	1901	385,690	18.13
Prince Edward Island	1891	27,126	24.87
	1901	21,206	20.62
Quebec	1891	609,925	40.98
	1901	487,591	29.02
Northwest Territories	1891	62,549	63.20
	1901	96,638	45.66

The smallest number in a group of 100 is in Ontario, 18.12 illiterates. Of these 10.27 consist of persons under five years old.

In 1891 21.48 in every 100 were illiterates; of these 11.34 were under five years of age, leaving a net of 7.85 persons five years and over in 1901 and 10.14 in 1891.

The Province of Quebec shows a great decrease in the number of illiterates. In 1891 the province had 40.98 persons in every group of 100 who could not read; in 1901 there were 29.57 persons in each 100 group. In 1891 those under five years formed 14.71 and in 1901 14.41 of the number of illiterates. This leaves a net of 26.27 in 1891 and of 15.16 in 1901 of illiterates over five years of age in each group of 100.

^aFrom Statistical Year Book of Canada, 1903.

Taking into account the somewhat decreased proportion of children under five in 1901 as compared with 1891, the statement stands: In 1891 Canada had of all illiterates 29.99 in every group of 100. Of these 12.48 were under five years of age, leaving a net of 17.51 illiterates over five years. In 1901 Canada had 24.62 illiterates in every group of 100 of the population. Of these 11.96 were under five years, leaving 12.66 illiterates; so that there has been an actual decrease in the ten years of 4.85 illiterates over five years in every group of 100.

AUSTRALIA.

[For previous articles in the Reports of the Commissioner of Education see: Secondary Education in New Zealand, by Sir Robert Stout, K. C. M. G., Report for 1890-91, Vol. 1., pp. 45-94.—Education in New Zealand, Report for 1892-93, Vol. 1, pp. 258-261.—Systems of Public Education in Australia, New Zealand, and Tasmania, Report for 1897-98, Vol. 1, pp. 189-214.—Education in Australasia, Report for 1898-99, Vol. 1, pp. 68-87.]

TOPICAL OUTLINE.

Brief account of the Australian federation. Current statistics of public schools and of private schools and universities. Brief outline of the systems of public education. Salient particulars from current reports. *New South Wales*: Report of the special educational commission appointed to investigate foreign systems and advise reforms for New South Wales. *Queensland*: Work of the itinerant teacher; the "grammar schools;" technical education; educational expenditure. *South Australia*: Scholarship funds; agricultural education. *Victoria*: Manual training; technical education; total educational expenditure. *West Australia*: Special difficulties of sparse population; teachers' training and salaries; promotions; manual training; total educational expenditure.

The Commonwealth of Australia, consisting of the six colonies (now denominated Original States) of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania, was proclaimed at Sydney, January 1, 1901.

Legislative power is vested in a Federal Parliament, consisting of the King, a Senate, and a House of Representatives, the King being represented by a Governor-General. The Senate consists of Senators (six for each of the original States) chosen for six years by the electors, voting in each State, except Queensland, as one electorate. In general, the Senate will be renewed to the extent of one-half every three years, but, in case of prolonged disagreement with the House of Representatives, it may be dissolved and an entirely new Senate elected. The House of Representatives consists, as nearly as may be, of twice as many members as there are Senators, the numbers chosen in the several States being in proportion to the respective numbers of their people, as shown by the latest statistics of the Commonwealth, but not less than five shall be chosen in any original State. For the first House of Representatives the number is 75, distributed as follows: New South Wales, 26; Victoria, 23; Queensland, 9; South Australia, 7; Western Australia, 5; Tasmania, 5. Every House of Representatives will continue for three years from the date of its first meeting, unless sooner dissolved. Electoral qualifications are those of the several States; the qualifications of persons eligible for either House are prescribed by the Constitution. Every Senator or Member of the House of Representatives must be a natural-born subject of the King, or have been for five years a naturalized subject under a law of the United Kingdom or of a State of the Commonwealth; He must be of full age, must possess electoral qualification in his State, and must have resided three years within the Commonwealth.

The legislative powers of the Federal Parliament are extensive, and embrace, among other matters, commerce, railways, shipping, light-houses, etc.; finance; defense; postal, telegraph, and like services; census and statistics; marriage and divorce; emigration and immigration; currency, banking, weights and measures; conciliation and arbitration in industrial disputes. The several

State parliaments retain legislative authority in all matters which are not transferred to the Federal Parliament. With respect to money bills the House of Representatives has special powers, and provision is made for cases of disagreement between the two Houses.

The Executive power, vested in the King, is exercisable by the Governor-General, who is assisted by an executive council of seven ministers of state. These ministers are, or must become within three months, members of the Federal Parliament; they are paid salaries not exceeding in all £12,000 (\$60,000) a year.

The Constitution provides for a Federal judicature, for an interstate commission on trade and commerce, for the transfer of State officials, State property, and State debts to the Commonwealth, for the collection and expenditure of duties during the transition period, and for alteration of the Constitution. Difficulties have already arisen in connection with the interpretation of the Constitution, and a measure has been passed providing, among other things, for the establishment of a high court with extensive appellate and Federal jurisdiction.

The site for the permanent capital of the Commonwealth, which must be situated in New South Wales and at a distance of at least 100 miles from Sydney, has not yet been selected; in the meantime the Federal Government has its seat at Melbourne. [From Statesman's Yearbook, 1904.]

The area and population of the six States comprised in the federation are as follows:

	Area, square miles.	Popula- tion, 1901.	Popula- tion per square mile.
1. New South Wales	310,700	1,354,846	4.28
2. Queensland	668,497	496,596	.74
3. South Australia	903,690	362,604	.40
4. Victoria	87,844	1,201,070	14
5. West Australia	975,920	184,124	.17
6. Tasmania	26,385	172,475	6.5

The leading industries of the colonies—agriculture, grazing, and mining—imply for a large proportion of the population all the conditions that pertain to rural life. The increase of the urban population is, however, noticeable. In New South Wales more than one-third the people (41 per cent) are in towns of above 9,000 inhabitants; Sydney, the capital, has 481,830. Of the population of Victoria 51 per cent are in towns having each more than 20,000 inhabitants; the capital, Melbourne, has 496,079.

The populations of the capital cities of the several States were as follows at the last census:

Capital.	Population, 1901.
Melbourne (Victoria)	496,079
Sydney (New South Wales)	481,830
Adelaide (South Australia)	165,723
Brisbane (Queensland)	119,428
Perth (West Australia)	27,553
Hobart (Tasmania)	24,655

Under the conditions of population here indicated the difference between urban and rural schools is very marked. The standards expressed in the law are only attainable in the large centers, and this is so clearly recognized that special adjustments are authorized by law in all the States for isolated communities and pioneer settlements.

The principal facts in the current record of the public school systems are here presented. To complete the summary the statistics of private schools and universities are also given.

Statistics of public day schools, 1902.

	Year.	Compulsory school age.	Total enrollment.	Average attendance.		Teachers.			Expenditure.		
				Number.	Per cent of enrollment.	Men.	Women.	Total.	Total.	Per capita of enrollment.	Per capita of population.
New South Wales	1902	6-14	243,667	155,916	63.63	1,141	1,247	5,401	\$4,074,415	\$16.72	\$2.99
Queensland	1902	6-12	97,131	72,800	74.95	1,141	1,247	2,391	1,413,061	14.54	2.84
South Australia	1902	7-13	62,926	42,690	67.80	1,141	1,247	1,351	726,960	11.54	2.03
Victoria	1902-3	6-13	235,922	150,271	66.41	1,917	3,149	5,066	2,825,632	12.50	2.35
West Australia	1902	6-14	22,765	18,448	81.03	261	416	677	426,510	18.73	2.31
Tasmania	-----	7-13	19,553	14,541	74.36	215	373	588	302,858	15.48	1.75

Statistics of private schools, universities, and colleges, 1902.

Province.	Private schools.		Teachers.	Universities.	
	Number.	Enrollment.		Number.	Students.
New South Wales	868	58,939	3,339	(a)	746
Queensland	180	12,867	692	-----	-----
South Australia	227	10,602	-----	1	598
Victoria	872	43,182	2,379	1	b 619
Tasmania	215	10,373	-----	-----	-----

^a Also three theological colleges and one college for women.

^b Also 621 students attending lectures.

THE SYSTEMS OF PUBLIC EDUCATION.

Control of the systems.—The control of education in each of the States is vested in a minister appointed for this particular interest or combining it with some closely allied interest; thus in New South Wales the minister of education has charge also of industry; in South Australia education and agriculture are combined. To the chief officer is consigned not only the general administration of the system but also its local direction. He decides as to the establishment of school districts and schools and controls the school funds and properties. In Victoria and New South Wales appointments of teachers and inspectors emanate from a civil-service board; in the other States they are made by the minister.

Local boards of advice are constituted by election (in Queensland appointed by the Governor), and their representatives carry great weight in respect to the school affairs of their several districts, but the authority remains in every case with the minister.

Sources of support.—In all the States the schools are supported by appropriations from the public treasury; instruction is gratuitous excepting in New South Wales, where a weekly fee is required of 3d. per child, but not to exceed 1s. in all for the children of one family. Power is given, however, to the minister or the local board to remit the fees in cases where the parents are unable to bear the charge.

Completeness of school provision.—The classes of schools recognized in the several laws give evidence of the widely different conditions under which the schools of different districts are maintained and also the efforts to adjust the school provision to these varying conditions.

The typical school is called simply the public or State school. It must maintain a certain average enrollment and must be kept in session the full time. There are also provisional schools; that is, schools which may be kept open for the full time annually, but whose average enrollment is below the standard, and half-time schools in districts where the number of children is too small to justify the expense of a full-time school. In such cases a teacher is appointed for two or more districts and holds the school in each on alternate days or for a half session each day, according to the distance to be traveled. House-to-house schools have also been recognized as a temporary expedient. The plan of conveying children at public expense from isolated districts to a central school has been recently adopted and is gradually superseding that of special and half-time schools. In Victoria this plan is extensively employed and has virtually eliminated the half-time schools. Night schools, and in some of the colonies infant schools, complete the public provision for popular education.

Compulsory attendance.—Attendance upon school is compulsory for all children of legal school age (this varies in the several colonies, as shown in the detailed statements) unless they are educated privately or exempt by law.

Secular character of the schools.—In Victoria and Queensland the public schools are strictly secular; in South Australia unsectarian religious instruction is allowed; in New South Wales and West Australia provision is made for religious instruction in the schools at an hour when children may be withdrawn if their parents object to their presence.

In addition to the very complete provision for elementary education maintained by the several governments every State in the Australian federation makes appropriations for secondary education either by a system of State scholarships open to competition or by grants to the individual institutions.

Technical education is also fostered in all the States and technical schools or classes aided by public funds are found in nearly all the chief cities; further particulars of the work are given in the citations from current reports.

The three Australian universities have been extensively aided by legislative appropriations and the University of South Australia by grants of land. These institutions are authorized to confer the same degrees as the universities in England, with the exception of degrees in divinity, and women are admitted to all their privileges.

The University of Sydney, New South Wales, opened in 1852, receives from government a yearly subsidy amounting with special aid to £12,317.

Melbourne University, Victoria, was established under a special act of the Victorian legislature, and the building was opened on October 3, 1855. The institution received in 1901-2, by way of endowment, £15,000 out of the general revenue. It is both an examining and a teaching body, and in 1859 received a royal charter empowering it to grant degrees in all faculties except divinity.

Affiliated to the university are three colleges—Trinity, Ormond, and Queens—in connection with the Church of England, Presbyterian, and Wesleyan churches, respectively. The school of mines at Ballarat is also affiliated to the university. From the opening of the university to the end of 1902 4,784 students matriculated and 2,939 direct degrees were conferred. In 1902 the students who matriculated numbered 124, the direct graduates numbered 122, and there were 621 students attending lectures. * * *

The University of Adelaide, South Australia, incorporated in 1874, is authorized to grant degrees in arts, law, music, medicine, and science. Its endowment amounts to £131,200 and 50,000 acres of land.

Particulars from current reports.—The following details from the latest official reports of the several States are of special interest.

NEW SOUTH WALES.

School attendance.—In addition to the enrollment in public elementary schools, 243,667 scholars, there were 1,622 pupils in attendance in 1902 at other schools aided by the State, classified as follows:

The Sydney Grammar School.....	626
The School for the Deaf and Dumb and Blind.....	98
The Reformatory and Industrial Schools.....	908
Total.....	1,622

Scientific and technical education.—A comparative statement of the total enrollment of students of the colleges and branch schools for the years 1896 and 1897 is given below:

	1896.	1897.
Sydney Technical College.....	3,302	3,678
Suburban classes.....	578	726
County classes.....	2,285	2,342
Classes connected with public schools.....	954	912
Total.....	7,119	a 7,658

a The corresponding total for 1902 was 12,110.

The year under review has been marked by the publication of the "interim report of a commission of two persons appointed April 11, 1902, to proceed to Europe and America for the purpose of inquiring into existing methods of instruction in connection with primary, secondary, technical, and other branches of education and of recommending for adoption whatever improvements" might in the judgment of the commissioners be advantageously introduced in New South Wales.

The report thus far submitted, which deals wholly with primary education, comprises special reports by each of the two commissioners, setting forth with great fullness the characteristic features of primary education in the several countries visited. These reports are preceded by an analytical study of the conditions in New South Wales interspersed with critical comparisons with those of the countries visited and accompanied by recommendations as to the changes which are necessary to bring education in New South Wales to the level desired.

The following citations from the report relate (1) to special conditions affecting education in New South Wales; (2) to the chief defect in the system emphasized in the report; and (3) summarized conclusions as to the reforms needed.

(1) Under the caption "State of education in New South Wales" attention is called to the fact that the task of educating a large and very sparsely populated community is far greater than might at first sight appear, and the administration of public education has had a gigantic problem to deal with. There has obviously been much zeal and devotion in its work, and there is mechanical precision in its scheme. The greatness of the work undertaken should command public respect for it. How far it meets public needs will be discussed later. It has already been indicated that reform is needed. Some idea of the magnitude of the work of the department may be had from the following statement:

Total number of schools under the department of public instruction of New South Wales open in 1902.

High schools -----	4
Public -----	1,903
Provisional -----	461
Half time -----	406
House to house -----	26
Evening -----	43
Total-----	2,846

The State is divided into thirty-five inspectorial districts, five of these being in the metropolitan area.

For these districts there are 31 inspectors' headquarters, Sydney being the headquarters of five inspectors. * * *

Approximately 114,000 miles are covered annually by the inspectors of the department. This traveling extends over an area of about 281,000 square miles.

(2) *The pupil-teacher system.*—The most serious defect in the educational system of New South Wales is the employment as teachers of young people of immature education, of immature physical and moral development, utterly without experience in teaching, and therefore without professional knowledge of its scope and significance. Until recently they could be taken at 14 years of age, a limit which, it was suggested at the departmental conference of January, 1902, should be merely changed to 15. * * *

It is quite impossible in a country employing untrained and poorly educated persons as teachers to make popular education comparable to that of the countries where teachers are required to be previously well educated and trained, and if the State should decide to adhere to the practice of employing pupil-teachers it should be with the full knowledge that in so doing it is electing to maintain a system of education decidedly inferior to the systems of Europe and America, and one that can not possibly produce satisfactory results. * * *

The removal of aspirants to a teaching staff from systematic education at so early an age as 14 or 15 (or even 16) and the endeavor to make good their educational limitations by private reading, by instruction to be had from a more or less exhausted primary teacher, by the year spent in the training school, etc., can not be viewed with complacency if it be desired to make our education comparable to that of other countries. Let it be borne in mind also that, inadequate as it is, the training-school experience is that of only a relatively small number. Thus the whole case is even less favorable than above implied.

In regard to the outlook of a teaching staff, a matter of no small importance, it may be said that under the best of circumstances teachers, as a consequence of their daily association with children—that is, with those who can not meet them on a level of equal intelligence and information and can not subject their opinions to criticism, as would an adult—need a corrective, viz, one which will tend to broaden the view and give a more normal outlook upon the totality of things. There can be no doubt whatever that the professional employment of children as members of the teaching staff places that staff under such limitations as must, in their influence upon the spirit of the community, be regarded as detrimental; for under any régime that tended to leave teachers generally restricted in outlook their power of educating—i. e., of developing children's characters and minds—must be correspondingly defective.

The training system of New South Wales—that is, the teaching of pupil-teachers by primary school teachers, coupled with a year spent at the training college by some (not all) of the teachers—can not be considered as an alternative to the European method—i. e., as an alternative in any way comparable therewith. * * *

Summarized conclusions.—The system of education in New South Wales indicates, by its scheme of training its teachers, by its absence of scientific and literary equipment in its training schools, by its curriculum, by its treatment of the subjects in its curriculum, by its lack of proper educational equipment in its schools, by its inattention to proper hygiene, that it needs to be radically reformed; and one of the most important elements of the reform will be the better education and training of its teachers.

These conclusions and the recommendations to which they lead are discussed by the commissioners at great length. Space permits here only a single

quotation from this section of the report, which indicates the admirable spirit in which the commissioners approach the most delicate part of their task.

The following recommendations are based upon the several assumptions hereunder mentioned, viz:

(a) That the educational system of New South Wales should aim at becoming at least the equal of the best systems in other parts of the world.

(b) That to attain to equality with either European or American education the whole spirit and method of the existing system of primary education must be transformed in respect of (1) the professional education and training of teachers, and (2) the development of the curriculum.

(c) That merely mechanical changes in the machinery of the department or mere changes in the curricula, or additions of new features thereto, in themselves will not suffice.

(d) That the chief activity of the inspectors and other officers of the department, especially in the immediate future, will have to be mainly educative, with a view to bringing the existing teaching staff into touch with the spirit of modern education.

(e) That in departing from the present régime the change should operate steadily and continuously until a new system is fully developed.

It may be added that change in the teaching method and in the whole scheme of inspectorial activity, while important, is but *mechanism*, and the supreme need is *a deeper understanding, not so much of educational mechanism, as of the spirit and the philosophy of the European and American systems.*

The attempt to provide a higher education and sounder professional training for future teachers will have to be supplemented by an attempt also to give a new direction to the activity of those at present on the teaching staff of the department. These things, together with better curricula and equipment, are necessary to real reform.

QUEENSLAND.

Work of the itinerant teacher.—The services of the itinerant teacher were continued during the year. Visits were paid to 95 families with 291 children over 5 years of age and 93 under 5 years, and in 67 of these families 210 children over 5 years of age are receiving instruction from relatives or tutors. In 45 of the homes the children were found to have reached or exceeded a fair standard of proficiency in the very elementary instruction that had been imparted to them, in 13 of the homes the proficiency was only moderate, and in 9 of them did not reach even a moderate standard.

The State also maintained 1,825 children in orphanages at an expense of \$119,235.

Secondary education.—In addition to the public elementary schools—there are 10 grammar schools in Queensland—6 for boys and 4 for girls. Each grammar school is governed by a board of seven trustees appointed by the government, and of these four are nominated by the governor in council and the others by a majority of the subscribers to the funds. The trustees hold office for three years and are eligible for reelection. They are empowered to make regulations for the filling of all vacancies that may occur in their number for the unexpired portion of the term of office, for the determination of fees to be paid by the scholars, for the salaries to be paid the teachers, and generally for the management, good government, and discipline of the school. All such regulations are subject to the approval of the governor in council.

Endowment at the rate of £1,000 per annum is paid by the State to each grammar school, making a total endowment of £10,000 annually to the grammar schools. On December 31, 1902, the aid granted by the State from the first institution of grammar schools reached a total of £281,937 1s. 3d. Of that amount £18,901 11s. 4d. represents special loans and is being repaid by quarterly installments of principal with interest.

Technical education.—Technical instruction is given in institutions mostly connected with schools of art, where special training can be obtained at small cost and generally outside the usual working hours. There were 22 institutions of this kind maintained in 1902, with 5,084 students. For this work Parliament

voted the sum of £10,650 (\$53,250) for the year 1902-3, subject to the condition that the aid extended in any case should not exceed 15s. for every £1 raised locally.

Expenditures.—As shown by tabulated statistics the public expenditure for primary education for the year 1901-2 was £282,612 (\$1,413,061). The total expenditure for all educational purposes was £316,334 (\$1,581,670).

SOUTH AUSTRALIA.

In addition to the expenditure for primary education, the government grants funds for scholarships, which enable the holders to carry on their studies in higher schools and universities. The amount thus appropriated in 1902 was \$7,262. For the advanced school for girls under the charge of the minister of education the government appropriated \$6,432. The total enrollment in the schools was 115, of which number 45 students held scholarships entitling them to free tuition.

In addition to the school of agriculture, which has been recently consolidated with the school of mines, classes in agriculture have been opened in several centers.

VICTORIA.

During the past year great progress has been made both in the preparation of teachers to give instruction in one form or another of manual training and in introducing the subject into the schools.

The paper-work training classes for teachers carried on throughout the State are well attended both by men and women students, who freely give up their Saturdays to the work, and not infrequently travel from 5 to 20 miles at their own expense to do so. These classes are conducted by ex-students of the training college, who obtained the necessary qualification during 1901, and they are visited periodically by the organizing inspector, Mr. Byatt. Although a considerable number of teachers are qualified to teach cardboard work, the lack of the necessary material has, up to the present, prevented its introduction to the classes for which it is intended. The teachers who in 1901 were selected to undergo a course of training in woodwork (Sloyd), attained the necessary standard of proficiency and were appointed to centers which are at present in active operation throughout the State.

The expenditure for this work for the year ending June 30, 1902, amounted to \$27,870.

Domestic economy.—Eleven centers have been equipped for teaching domestic economy to girls and were maintained for the year 1901-2 at a total expense of \$14,022.

Technical education.—The number of technical schools (including those termed "schools of mines") receiving aid from the State on June 30, 1902, was the same as in previous years, viz, 18. Five of these afford instruction in science, art, and trade subjects; 5 in art and science; 2 in art and trade; while 5 schools confine their teaching to art and 1 to science subjects only. Five schools, viz, the Working Men's College, Melbourne, and the schools of mines at Ballarat, Bendigo, Bairnsdale, and Stawell, are classed as certified science schools, and are eligible to receive State school exhibitioners (holders of government scholarships).

In these schools full courses in mining, engineering, geology, etc., extending over three or four years have now been established.

The total expenditure in connection with technical schools for 1901-2 was £22,958 3s. 1d. (\$114,790).

During the coming year the question of relating the work done in these schools more closely to the industrial life of the district will be carefully considered. It is intended to withdraw subsidy from those schools which are not able to attract a sufficient number of students, and which do not in their teaching supply a real need in local industrial requirements.

Expenditure.—The total public expenditure for education for the year ending June 30, 1902, was \$4,001,014.

WESTERN AUSTRALIA.

One of the great difficulties in this sparsely peopled State is, naturally, to provide education for the settlers in the country districts and on the gold fields. The farms are large, and it is not easy to place schools within reach of all the children. The country provisional schools are the most expensive to provide, as buildings have to be erected, and the teacher paid an adequate salary, though there may be only a dozen or so scholars to teach. It is doubtful what method will have ultimately to be pursued. In America and Canada an attempt has been made, apparently with success, to centralize the instruction in larger schools and to convey the children of scattered settlers from a distance daily or weekly or even to establish boarding houses for them.

The cost per head in the provisional schools is £7 1s. 11d. (about \$36) on the average attendance and £5 13s. 5d. (\$28) on the enrollment. The cost per head in special schools in the northwest is as much as £8 6s. 6d. (\$41) on the average attendance. The cost per head for the children of the whole State in government schools is £4 10s. 9d. (\$22) on the average attendance, or £3 14s. 1d. (\$38) on the enrollment. The government, however, recognizes that, in spite of the expense, education must be provided for these isolated settlers, who are doing such valuable work in developing the resources of the country. * * *

Teachers' training and salaries.—The great event of the year has been the opening of the training college for teachers. The college has been established at Claremont, about halfway between Perth and Fremantle, and is open both for day and resident students of both sexes. It is clearly advantageous, for many reasons, to the students that they should be in residence, but the position of the college enables those whose parents reside in the metropolitan district to reach it easily. The college can accommodate sixty students, and, as the course of training is for three years, should send about twenty trained teachers per annum. There is no fear that this number of teachers would ever be too many for the vacancies in the schools. Apart from the present influx of children, which is abnormal, the ordinary growth of population and the ordinary retirement of teachers through marriage, age, or other causes will always be in excess of that number. * * *

It has been pointed out in the reports of previous years that the average salary of the teachers has been very low, and that it was essential, if a good start was to be secured, that they should receive a wage above, rather than below, that ruling in other professions in the State. Since the new scale of salaries has been in operation there has been a satisfactory increase in the average salary, which is now £151 10s. 9d. (\$757) for heads and adult assistants. This, however, is not a sufficiently large sum when it is borne in mind that it is not as much as most mechanics receive, and the remuneration of the lower branches of the service is still very small. During the year a fresh adjustment of salaries has been made by the abolition of bonuses for successful teaching. This system has been found unsatisfactory. It is practically impossible to award bonuses on any other basis than that of school reports, and the school report may be good owing to the efforts of one or two individuals of the staff, whose work has benefited others on the staff who have not deserved such bonus; or, on the other hand, the weak teachers may have deprived the deserving ones of the bonus to which their real efforts should entitle them. The Government, in making arrangements for the abolition of this system, was enabled to set by a somewhat larger sum of money for increasing the regular salaries of such of the staff as had previously received these sums. * * *

Promotion.—The old system of examination of individual children by the inspectors has now been entirely abolished, and in all the schools the teachers are given the responsibility of judging the suitability of children for promotion from one standard to another. The promotion of bright children has been more rapid under the new system. There is a slight increase in the number of children reaching the upper standards, and the inspectors note that the system not only encourages the bright children by giving them an opportunity of passing on more quickly to higher work, but at once equalizes the classes, makes the task of the teachers less difficult, and gives them also more scope for originality. There is said to be a marked improvement in the tone of the school work and the intelligence of methods. The schools can now be judged by the inspectors on these points, and they are not obliged to spend their whole time in testing the "passing" capacity of individual scholars. Much more assistance can be

given to the teachers under the new system, as the inspectors are able to spend more time in showing better methods and giving advice.

Manual training.—Needlework, which is most necessary for girls, is being taught throughout the schools, and the inspectors are taking care sufficient time is given to it.

The important subjects of manual training and cookery have been developed during the year. Though the numbers passing through the Perth and gold-field centers (special classes) have been slightly less than in previous years, this is due to the fact that other centers are being prepared, and that classes of teachers have been held by Mr. Hart and Miss Devitt to enable their systems to be extended much more widely throughout the State. While they were holding classes for teachers some boys and girls had for the time to stand down. There have, however, been 473 boys instructed in the use of tools in the metropolitan district; 146 girls have been through the cookery course, while in the gold fields 270 and in Northam 46 boys have received instruction from well-qualified teachers in other parts of the State—for example, at Donnybrook, etc.—teachers have begun courses of instruction after seeing the work as carried out in Perth. In addition to a class for some months in Perth, a summer course during the Christmas holidays was attended by over 20 teachers at Bunbury. * * *

The technical school has made great strides under Mr. Purdie's direction, and now can boast of being a most flourishing institution, the temporary and inadequate buildings which house it in no way damping the ardor of the teachers or students.

Expenditure.—The amount expended in 1902 for primary education (\$426,510) was 78 per cent of the entire educational expenditure for the year, viz, \$545,985.

NEW ZEALAND.

The following particulars with respect to the operations of the New Zealand system of education for 1902-3 have been furnished to this Office by Mr. Mark Cohen, editor of the Dunedin Evening Star, whose comments add great interest to the facts presented:

Partly through the operation of the school attendance act of 1901 and partly from other causes, such as the increase in the number of schools in sparsely populated districts, attendance at public schools has improved, and there seems to be good reason to hope that it may still further improve. The standard of regularity of attendance reached in 1900 and 1901—namely, 84.1 per cent of the average weekly roll number—rose to 84.9 in 1902. This figure is a high one compared with the corresponding figures for the British Isles and for the several States of the Australian Commonwealth. According to the latest returns which are available, the average attendance in primary day schools in England was 83.6 per cent of the net enrollment, in Scotland 82.9 per cent, and in Ireland 65 per cent. For the Australian States the numbers were: New South Wales, 72.6 per cent; Victoria, 66.5; Queensland, 81.3; South Australia, 79.9; West Australia, 81.6; Tasmania, 74.4. These returns are for 1901 in the case of Scotland, Ireland, and New South Wales, and for 1902 in the others.

The number of children of Maori and mixed race attending the public schools has increased during the year by 340—namely, from 2,688 to 3,028; the number of such children in the Maori village schools was greater by 444 in 1902 than it was in 1901; in the Maori boarding schools there was an increase of 7. In the aggregate there were 6,626 children of Maori and mixed race receiving instruction last year, as against 5,835 the previous year; that is, there was a total increase of 791.

The proportion of boys to girls is almost the same as for 1900 and 1901—52 per cent to 48 per cent. Taking the average for the last four years, for every 100 boys on the rolls of the schools there are 92.4 girls.

The ratio of the children under 10 years of age to those over that age is slightly lower than it was last year. The actual percentages are, respectively, 51.9 and 48.1 of the roll number.

The following table of attendance at schools on March 31, 1901, is interesting:

	Males.	Females.	Total.
Public schools	68,810	63,931	132,741
Colleges, etc	2,834	2,090	4,924
Private schools	2,294	4,203	6,497
Denominational schools	3,806	4,550	8,356
Home instruction	2,215	2,840	5,055
Total	80,019	77,614	157,633

The number of schools open at the end of 1902, if 92 half-time schools are counted as equivalent to 46 full-time schools, was 1,708, or 31 more than were open in December, 1901.

On December 31, 1902, there were employed in the State schools 3,704 teachers, of whom 2,957 were adults and 747 pupil teachers. The average number of children in attendance was 30.7 to each teacher. Out of the total number of adult teachers 1,272 were men and 1,635 women; in other words, for every 100 men engaged in teaching in the public schools of the colony there were, at the end of 1902, 132 women so employed. Comparison with the principal Australian States and with England shows that for every 100 adult male teachers the number of adult female teachers was: In New South Wales, 66; Victoria, 87; Queensland, 108; South Australia, 186; England, 293. In this colony the proportion of female to male teachers in 1892 was 94 of the former to 100 of the latter, so that the proportion of female to male teachers has increased in the interval from 94 to 132 per cent of males. On which fact the secretary of education comments thus: "It will be seen that the substitution of women for men as teachers in our primary schools is a process that has been going on for some time in various countries, although it has not yet reached in New Zealand the stage it has reached in England and America, or even in South Australia." The number of pupil teachers actually employed in New Zealand at the end of the year was 747, or about one-fifth of the total number of the staff of the schools.

The effect of the public school-teachers' salaries act has been to improve the staffing of the schools by reducing the average number of children under the charge of one teacher. It is to be feared, however, that in some cases the number of children actually under the charge of a single teacher considerably exceeds the number that the act appears to indicate. It would probably tend to greater efficiency if, subject to the conditions of classification and suitability of the several teachers for the various classes of each school, the average number under the instruction of any teacher or teachers did not in general greatly exceed the number indicated by the scale of staffs in the schedule to the act, which allows not more than 60 children for each adult teacher, and not more than 30 for each pupil-teacher, or on the average not more than 45 for each member of the staff. But neither school committees nor education boards appear inclined to take advantage of this provision in the act, with the result that the lot of the second male assistant is an exceedingly unhappy one just now, seeing that the standard of living throughout the colony has been raised on the average over 20 per cent; and teachers of this class are leaving the service by the score, in order to improve their worldly position.

The total of all salaries and allowances at the rates paid at the end of the year was £118,564 18s. 7d. (\$2,092,824). This includes the salaries and lodging allowances of pupil teachers, as well as all salaries, house rent, and other allowances paid to adult teachers. The average salary per teacher was therefore £113 0s. 6d. (\$565). The principal item showing an increase is that of teachers' salaries and allowances, £419,701 (\$2,098,505) for 1902, as against £382,061 (\$1,910,305) for 1901, but out of this the sum of £6,742 (\$33,710) was paid as the last installment of the increases to salaries for 1901. The net increase over 1901 was therefore £24,156 (\$120,780) on this head. Another item showing a considerable increase is the expenditure on manual and technical instruction, which was £11,605 (\$58,025) for 1902, as against £7,611 (\$38,055) for 1901.

At the beginning of 1902 there were 69 Maori schools, and during the year this number has been increased by 8. The total cost of educating the Maori children during the year was £26,946, or about £7 per pupil.

A field in which there has been marked advance during the year has been the manual and technical department, to which much attention has been devoted.

The total number of recognized classes at the end of 1902 was 911. Of the latter, 568 are classes for manual instruction in primary schools, 279 are technical classes (properly so called) for adults, while 64 are continuation classes. The total number of these classes is now 1,629. The work is being taken up in the small as well as the large centers and to an increasing extent in the country.

During the past year a very important new departure has been taken—providing “free places” in the technical and secondary schools. All children who succeed in passing the sixth standard grade or year at the age of 14 years are entitled to free tuition for two years at the nearest secondary school, and similarly free scholarships (tenable for two years) are granted on certain conditions in connection with the technical schools. And these boys and girls who during the currency of these scholarships make satisfactory progress with their studies are entitled to receive an additional two years’ instruction at the respective schools they attend. So far 16 out of the 25 secondary schools in the colony have accepted the terms on which the Government have offered monetary assistance to the governing bodies of these institutions, and there has been a large influx of pupils to these schools. The same end is to be attained in the country districts by the establishment of district high schools, the number of which is nearly 60, as against the 15 in existence two years ago. The process of freeing the secondary schools is, however, to go on gradually until the dream of the advanced section of our educationists—the entire freeing of the national system from the lowest rung of our educational ladder to the highest, to wit, from the kindergarten to the university—has been realized. The present minister of education (the Hon. Mr. Seddon) is evidently in sympathy with this school of educational reformers, for on a recent occasion from his place in Parliament he is reported to have said: “It is not the intention of Government to stop here, but to go on until the way is open for any boy or girl of promise in New Zealand to receive the highest education which the colony has in its power to give. With this end in view, the Government have determined to provide house allowance for one year for two pupils in the fifth standard in each educational district—26 in all—who are specially gifted and have received the highest number of marks, but who are, from outside causes, unable to continue their school course; and to establish 24 ‘national scholarships,’ the object of which will be to enable holders to go from primary schools to secondary schools and thence to the university, full provision being made for the cost of tuition and for their maintenance.”

Sir Robert Stout (former minister of education) was recently appointed chancellor of the New Zealand University in succession to Sir James Hector. The Hon. W. C. Walker, after seven years’ occupancy of the portfolio of education, in July last resigned that position and his seat in the university, in order to become speaker of the legislative council. During Mr. Walker’s administration of the education department several notable reforms have been inaugurated, the principal being the extension of “freedom of classification” to all the branches of the primary school course. Education is meanwhile administered by the Right Hon. R. J. Seddon, premier of the colony.

A parliamentary committee has been set up for the consideration of the entire field of education in the colony, but it is not expected that they will be able to do more than present an interim report this session.

Superannuation for teachers.—Mr. Cohen furnishes also an account of the efforts made during the last twenty-five years, having for their object the establishment of a scheme for the superannuation of aged and infirm teachers.

Owing [he says] to a variety of causes none of these schemes were ever brought to a successful issue. The chief causes of failure seem to have been (1) the want of a colonial scale of salary, (2) the lack of organization among teachers themselves, and (3) the impracticability and financial unsoundness of the schemes proposed.

The passing of the “public school-teachers salaries’ act, 1901,” removed the first cause of failure, and as a result of the splendid progress made by the New Zealand Educational Institute, teachers no longer lacked organization. It now only remained for some one to formulate a practicable, financially sound, and acceptable scheme.

A working basis was submitted in 1902 by a member of the New Zealand Educational Institute, and a bill embodying its proposals was introduced into

Parliament toward the close of the year's session, but no further legislative action has been taken in the matter. Mr. Cohen expresses the opinion that—

No teachers' superannuation bill will be brought forward during the present session, if, indeed, during the existence of the present Parliament, the feeling of the Government evidently being that it is not wise to further sectionize in the matter of retiring allowances. In all probability [he says] the teachers of the colony will be dealt with sooner or later in this regard as a branch of the civil service, which they ought to have been all along.

Mr. Cohen also furnishes interesting particulars with respect to Dr. John Hislop, the first secretary of education in New Zealand, whose death occurred May 19, 1904, at the age of 83.

This veteran educator was educated at Edinburgh, where he gained first prizes in all classes which he attended at the Edinburgh School of Arts, now the Watt College, and at the conclusion of the prescribed course was awarded the school's diploma. After a varied and successful career as teacher, first in Scotland and afterwards in New Zealand, to which colony he emigrated in 1856, he was appointed in 1861 secretary to the education board and inspector of schools in Otago and performed the difficult and arduous duties of the dual office for a number of years. He had a large share in the establishment of the boys' and girls' high schools, teachers' training college, school of art, and district high schools throughout Otago. On the establishment of the Otago University, in 1869, Mr. Hislop became its first secretary and registrar, from which office he retired in 1871. On the establishment of the Caversham Industrial School, in 1869, the duty of organizing and supervising was intrusted to Mr. Hislop, in conjunction with the late Mr. St. John Branigan. * * * A record of the services rendered to the public by Doctor Hislop would be incomplete without reference to the education bill which was drafted by him and passed its second reading in the House of Representatives in 1871. The measure was subsequently dropped, and it was not till the session of 1877 that the education act embodying the greater proportion of the clauses drafted by Doctor Hislop came into force. He became the first secretary of the newly formed education department at Wellington, on the duties of which office he entered in January 1878. He was presented, on leaving Dunedin, with a massive silver vase and an address from 165 teachers who had served under him, as a token of their gratitude, confidence, and good will. About the same time he was elected a Fellow of the Royal Society of Edinburgh. Early in 1882, when the education department had been brought into good working order, Doctor Hislop was granted a year's leave of absence to visit Great Britain. Before leaving the colony he was entertained at a public dinner in Otago, and a sum of money was placed in his hands with which to procure a life-size portrait of himself in oils. The painting, which was obtained from Horsburgh, Edinburgh, now adorns the walls of the university library. For his well-known services in the cause of education the senatus of the University of Edinburgh (his own "alma mater") conferred upon him the honorary degree of LL. D. on the occasion of his visit to the old country. Returning to New Zealand, Doctor Hislop resumed his position in the education department, from which he retired in March, 1886.

From the time of his retirement to his death Mr. Hislop was actively engaged in promoting varied public interests.



CHAPTER II.

STATISTICS OF GROWTH.

By FRANZ BOAS and CLARK WISSLER.

During the last thirty years a vast amount of anthropometric material relating to physical and mental growth has accumulated. Unfortunately, up to the present time there has been little agreement in regard to the methods of collecting and of treating such material. The following pages contain a discussion of some of the more important problems which have a bearing upon the methods of collecting and reducing observations on growth.

In a paper published in the Report of the Commissioner of Education for 1896-97 (Chap. XXXIV, pp. 1541-1599), F. Boas discussed some of the data on the growth of American children that were available at the time, and, in a theoretical introduction, he treated some of the problems that confront us in the discussion of material of this character. In that paper the effect of retardation and acceleration of growth upon the distribution of measurements was somewhat fully discussed. It was shown that the assumption of a symmetrical distribution of variations in period—i. e., of accelerations and retardations—following the laws of chance gives an adequate explanation of the characteristics of the observed curves of growth. (Ibid., p. 1552.)

The verification of this theory is of great importance, because, if it is correct, it follows that the developmental stage of a child at a certain period depends primarily on phenomena of retardation and acceleration, which influence the whole body at the same time, so that all measurements should show a tendency to vary in the same direction; either all of them would tend to lag behind the normal average or all would be in advance of it. If this is so, then the assumption that is so often made, that during a period of energetic physical growth there is a rest of mental development and vice versa, would lose much of its probability.

Assuming that during the period of growth deviations from the normal in the values of a certain measurement are partly due to variations in period, partly to hereditary and other causes of a permanent character, it would follow that other measurements of the same individual would be affected by the same groups of causes, particularly by the same variation in period. The more rapid the rate of growth, the greater will be the effect of variation in period upon all the different measurements. Retardation of developmental period, for instance, would considerably depress the values of all the measurements of the individual. Consequently, the correlations between different measurements ought to be closer during periods of rapid growth than at other periods.

We have investigated this problem by means of statistics collected in Worcester, Mass., and Toronto, Ontario, and by Peckham's measurements collected in Milwaukee, Wis., which the collector had the great kindness to place at our disposal.

Unless stated otherwise, the theory and plan of investigation were worked out by F. Boas, while the calculations were made by Clark Wissler.

The theory of correlations during the period of growth may be formulated as follows: We assume that the value of a certain measurement depends partly upon variation in period, partly upon other causes, and that the amount of growth is proportional to time. We call τ the deviation in time and $d\tau$ the amount of growth during the period τ , while the deviations due to other causes may be called x . The total deviation, ξ , from the normal for any individual of a given age will then be

$$\xi = d_1\tau + x.$$

For another measurement of the same individual the corresponding values may be called d_2 , y , and η . Then

$$\eta = d_2\tau + y.$$

We will designate averages by brackets.

$$[\xi^2] = d_1^2[\tau^2] + [x^2]$$

$$[\eta^2] = d_2^2[\tau^2] + [y^2]$$

$$[\xi\eta] = d_1d_2[\tau^2] + [xy]$$

If we call $[\xi^2]$, $[\eta^2]$, $[\xi\eta]$, $[\tau^2]$, $[x^2]$, $[y^2]$, $[xy]$, respectively,

μ_1^2 , μ_2^2 , $R\mu_1\mu_2$, σ_τ^2 , σ_1^2 , σ_2^2 , $r\sigma_1\sigma_2$, we have

$$\mu_1^2 = d_1^2\sigma_\tau^2 + \sigma_1^2$$

$$\mu_2^2 = d_2^2\sigma_\tau^2 + \sigma_2^2$$

$$(1) \quad R\mu_1\mu_2 = d_1d_2\sigma_\tau^2 + r\sigma_1\sigma_2.$$

It appears from this that, if $r\sigma_1\sigma_2$ remains fairly constant, $R\mu_1\mu_2$ will be the greater, the greater $d_1d_2\sigma_\tau$. It does not seem probable that $r\sigma_1\sigma_2$ should undergo very great changes during the later periods of growth. If, therefore, it can be shown that $R\mu_1\mu_2$ increases with the rapidity of growth—that is, with the value of d_1d_2 —our theory would seem to be corroborated.

In order to investigate this question, we have calculated the correlations between stature, weight, height sitting, length of head, and width of head from the measurements collected in Worcester, Mass. Unfortunately, the series is not long enough to give quite satisfactory results. We give first the general series of averages and variabilities for various measurements.

TABLE Ia.—Averages and variabilities of measurements of boys, Worcester, Mass.

[Figures printed in italics indicate the number of individuals measured. Measurements are in millimeters and in pounds avoirdupois.]

Age.	Stature.	Height sitting.	Weight.	Length of head.	Width of head.	Length of forearm.	Width of hand.
6.-----	1,129±61 <i>118</i>	622±30 <i>110</i>	45.7±5.5 <i>100</i>	178.2±6.7 <i>105</i>	140.7±5.1 <i>105</i>	309±9 <i>6</i>	58±3 <i>13</i>
7.-----	1,179±50 <i>203</i>	642±28 <i>203</i>	49.7±5.9 <i>202</i>	179.6±6.4 <i>142</i>	142.1±4.6 <i>112</i>	319±20 <i>16</i>	60±4 <i>27</i>
8.-----	1,228±53 <i>193</i>	663±27 <i>137</i>	54.1±6.4 <i>190</i>	180.1±5.6 <i>130</i>	143.6±4.8 <i>104</i>	331±14 <i>64</i>	62±3 <i>85</i>
9.-----	1,278±55 <i>252</i>	685±30 <i>225</i>	59.4±7.3 <i>220</i>	181.2±6.3 <i>167</i>	144.0±4.7 <i>157</i>	344±15 <i>100</i>	65±3 <i>160</i>
10.-----	1,320±59 <i>252</i>	711±31 <i>228</i>	65.8±8.5 <i>221</i>	181.7±5.5 <i>157</i>	144.5±4.6 <i>158</i>	350±20 <i>100</i>	67±4 <i>57</i>
11.-----	1,374±62 <i>214</i>	727±35 <i>215</i>	71.3±10.3 <i>210</i>	183.4±6.1 <i>151</i>	144.6±5.0 <i>151</i>	373±21 <i>104</i>	69±4 <i>117</i>
12.-----	1,426±64 <i>274</i>	748±35 <i>256</i>	78.4±12.2 <i>248</i>	183.3±6.1 <i>177</i>	145.6±5.6 <i>177</i>	387±20 <i>93</i>	71±4 <i>93</i>
13.-----	1,479±77 <i>253</i>	771±39 <i>214</i>	86.9±15.7 <i>214</i>	185.2±6.4 <i>168</i>	146.8±4.8 <i>168</i>	405±23 <i>83</i>	74±5 <i>83</i>
14.-----	1,546±84 <i>228</i>	806±42 <i>203</i>	98.2±16.5 <i>203</i>	187.2±6.4 <i>154</i>	146.9±4.8 <i>154</i>	427±28 <i>75</i>	78±5 <i>85</i>
15.-----	1,620±84 <i>191</i>	842±46 <i>183</i>	113.8±20.8 <i>162</i>	188.3±6.2 <i>152</i>	148.1±4.6 <i>153</i>	445±23 <i>19</i>	80±6 <i>43</i>
16.-----	1,660±65 <i>120</i>	866±35 <i>116</i>	122.6±17.1 <i>103</i>	190.8±6.4 <i>96</i>	149.2±4.8 <i>96</i>	454±19 <i>27</i>	83±4 <i>27</i>
17.-----	1,686±56 <i>53</i>	885±33 <i>51</i>	132.7±14.9 <i>39</i>	191.6±6.0 <i>49</i>	149.5±4.9 <i>49</i>	-----	-----

TABLE Ib.—Averages and variabilities of measurements of girls, Worcester, Mass.

[Figures printed in italics indicate the number of individuals measured. Measurements are in millimeters and in pounds avoirdupois.]

Age.	Stature.	Heightsitting.	Weight.	Length of head.	Width of head.	Length of forearm.	Width of hand.
6	1,120±47 <i>104</i>	616±27 <i>99</i>	43.8±4.8 <i>97</i>	173.1±4.6 <i>84</i>	138.0±3.5 <i>84</i>	304±18 <i>19</i>	58±5 <i>23</i>
7	1,171±56 <i>143</i>	639±29 <i>129</i>	47.9±6.1 <i>128</i>	174.7±6.0 <i>101</i>	139.1±4.1 <i>101</i>	315±24 <i>43</i>	58±3 <i>49</i>
8	1,221±58 <i>146</i>	660±31 <i>146</i>	51.9±6.6 <i>142</i>	175.0±5.9 <i>105</i>	140.3±4.3 <i>105</i>	328±18 <i>64</i>	60±3 <i>73</i>
9	1,270±54 <i>174</i>	680±28 <i>152</i>	58.0±8.4 <i>147</i>	176.3±6.3 <i>118</i>	140.2±4.8 <i>118</i>	337±15 <i>59</i>	62±3 <i>71</i>
10	1,330±65 <i>215</i>	705±34 <i>174</i>	64.1±10.5 <i>170</i>	177.8±5.9 <i>160</i>	142.1±4.5 <i>160</i>	357±22 <i>65</i>	63±3 <i>80</i>
11	1,372±64 <i>233</i>	726±36 <i>202</i>	70.0±10.4 <i>199</i>	178.2±5.4 <i>152</i>	142.1±4.9 <i>152</i>	370±23 <i>88</i>	67±4 <i>103</i>
12	1,448±72 <i>252</i>	758±37 <i>208</i>	81.0±13.1 <i>201</i>	180.0±5.4 <i>165</i>	143.2±4.7 <i>165</i>	382±19 <i>85</i>	70±4 <i>116</i>
13	1,499±69 <i>213</i>	788±42 <i>190</i>	89.7±15.3 <i>183</i>	181.7±6.8 <i>142</i>	144.0±4.9 <i>142</i>	407±24 <i>70</i>	72±4 <i>82</i>
14	1,539±72 <i>164</i>	815±40 <i>151</i>	100.6±16.8 <i>149</i>	182.5±6.4 <i>115</i>	144.0±5.3 <i>115</i>	413±20 <i>48</i>	74±3 <i>54</i>
15	1,569±53 <i>147</i>	835±32 <i>138</i>	106.2±13.9 <i>136</i>	184.3±5.2 <i>109</i>	145.4±4.5 <i>109</i>	427±20 <i>38</i>	74±4 <i>36</i>
16	1,572±60 <i>107</i>	840±29 <i>101</i>	108.7±12.1 <i>100</i>	183.7±5.7 <i>91</i>	144.6±4.9 <i>91</i>	422±26 <i>17</i>	74±4 <i>19</i>
17	1,591±52 <i>69</i>	853±31 <i>69</i>	114.6±13.6 <i>64</i>	184.8±5.5 <i>69</i>	145.2±4.3 <i>69</i>	-----	-----

In Table II are contained the coefficients of correlation for various ages and the number of observations from which the coefficients have been calculated. Table III contains the values for the product $R\mu_1\mu_2$ and the approximate values of d_1d_2 .

TABLE IIa.—Correlations for boys, Worcester, Mass.

[n =number of cases; r =coefficient of correlation.]

Age.	Stature and weight.		Stature and height sitting.		Weight and height sitting.		Stature and length of head.		Stature and width of head.		Height sitting and length of head.		Height sitting and width of head.		Weight and length of head.		Weight and width of head.		Length and width of head.	
	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n
6	0.86	109	0.78	110	0.77	110	0.30	105	0.20	105	0.34	92	0.24	92	0.46	92	0.40	92	0.30	105
7	.78	202	.81	203	.79	202	.36	145	.27	145	.38	145	.29	142	.41	141	.20	141	.18	142
8	.69	190	.83	189	.52	189	.44	121	.19	121	.45	110	.30	110	.46	121	.25	121	.14	121
9	.72	230	.79	225	.70	220	.41	167	.23	167	.37	138	.29	138	.30	134	.40	134	.29	167
10	.83	221	.80	228	.82	221	.31	158	.24	158	.25	134	.29	134	.33	128	.34	128	.17	157
11	.88	208	.88	211	.87	205	.39	151	.29	151	.28	122	.26	124	.51	118	.25	118	.12	151
12	.81	246	.88	256	.87	247	.36	177	.24	177	.26	149	.19	156	.45	149	.26	147	.30	177
13	.74	214	.90	221	.81	214	.32	168	.28	168	.21	129	.25	129	.23	130	.34	130	.15	168
14	.87	203	.92	238	.80	203	.39	154	.11	154	.39	154	.14	154	.54	129	.29	129	.34	154
15	.81	162	.85	191	.79	162	.42	152	.33	152	.43	144	.38	144	.48	126	.42	126	.14	152
16	.71	93	.79	116	.67	93	.31	96	.17	96	.25	92	.14	92	.54	69	.44	69	.28	96
17	.56	39	.77	51	.51	39	.19	49	.25	48	.16	47	.20	47	.37	35	.28	35	.18	48

TABLE IIB.—Correlations for girls, Worcester, Mass.

[n =number of cases; r =coefficient of correlation.]

Age.	Stature and weight.		Stature and height sitting.		Weight and height sitting.		Stature and length of head.		Stature and width of head.		Height sitting and length of head.		Height sitting and width of head.		Weight and length of head.		Weight and width of head.		Length and width of head.	
	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n	r	n
6	0.68	97	0.67	99	0.59	97	0.21	84	0.34	84	0.22	79	0.38	79	0.23	77	0.44	77	0.30	84
7	.71	128	.74	129	.69	128	.37	101	.17	101	.40	87	.23	87	.50	87	.35	87	.09	101
8	.79	145	.81	146	.60	142	.32	104	.12	105	.31	85	.06	85	.39	82	.39	82	.16	106
9	.79	147	.81	152	.76	147	.38	118	.17	118	.33	96	.10	96	.51	91	.25	91	.30	118
10	.82	170	.84	174	.77	170	.36	160	.18	160	.41	119	.28	119	.28	115	.31	115	.25	160
11	.88	199	.83	202	.84	199	.37	152	.12	152	.32	123	.14	123	.41	120	.19	120	.29	152
12	.74	201	.84	208	.85	201	.38	145	.44	145	.33	121	.28	121	.36	114	.32	114	.24	165
13	.70	183	.80	190	.72	183	.40	142	.24	142	.52	119	.33	119	.51	113	.43	113	.32	142
14	.74	149	.85	151	.75	146	.37	115	.42	115	.40	102	.42	102	.50	99	.49	99	.39	115
15	.57	138	.81	138	.61	134	.14	109	.09	109	.14	98	.17	98	.21	98	.23	98	.26	109
16	.65	160	.71	161	.71	100	.27	85	.15	85	.45	85	.23	85	.41	84	.37	84	.43	91
17	.59	64	.71	69	.47	64	.32	69	.06	69	.06	69	.06	69	.49	64	.33	64	.29	69

TABLE III.—Values of $R\mu_1\mu_2$ and of d_1d_2 .

Age.	Boys.						Girls.					
	Stature—Weight.		Stature—Height sitting.		Weight—Height sitting.		Stature—Weight.		Stature—Height sitting.		Weight—Height sitting.	
	$R\mu_1\mu_2$	d_1d_2	$R\mu_1\mu_2$	d_1d_2	$R\mu_1\mu_2$	d_1d_2	$R\mu_1\mu_2$	d_1d_2	$R\mu_1\mu_2$	d_1d_2	$R\mu_1\mu_2$	d_1d_2
6	290	200	1,460	1,000	130	80	150	200	800	1,150	80	92
7	230	210	1,100	1,000	120	84	270	200	1,900	1,100	130	88
8	240	240	1,200	1,050	180	101	300	250	1,500	1,000	120	100
9	280	290	1,300	1,200	160	139	360	335	1,200	1,210	180	134
10	410	288	1,500	1,010	220	126	560	300	1,800	1,150	280	138
11	520	302	1,900	860	280	113	560	467	1,900	1,430	310	221
12	630	406	2,000	1,140	370	172	680	617	1,900	1,950	410	304
13	920	600	2,700	1,740	500	290	730	470	2,200	1,340	430	274
14	1,210	933	3,300	2,520	560	482	890	287	2,500	860	510	197
15	1,420	695	3,300	1,710	760	365	420	64	1,400	190	270	48
16	800	310	1,860	690	390	197	470	33	1,200	150	250	42
17	470	125	1,400	300	250	60	420	12	1,100	50	190	16

The preceding tables show at once that during the period of growth the correlation between the various measurements is greater than in the adult. This is particularly true in regard to those measurements which show the strongest increases, i. e., stature, weight, and height sitting. Table III shows that the greatest values of $R\mu_1\mu_2$ are found a little later than the greatest values of the products d_1d_2 , the difference in period being about one year in boys and two years in girls. This may be due to the increase of the values σ_t , σ_1 , and σ_2 with increasing age (see p. 38).

In order to obtain a better insight into the characteristics of the values of r during the period of growth, we have taken the averages of its values for three successive years and have given these averages to the middle years. The results are contained in the following table and are graphically represented in fig. 1 (p. 47).

TABLE IV.—*Correlations.*

Age.	Boys.										Girls.									
	Stature and weight.	Stature and height sitting.	Weight and height sitting.	Stature and length of head.	Stature and width of head.	Height sitting and length of head.	Height sitting and width of head.	Weight and length of head.	Weight and width of head.	Length and width of head.	Stature and weight.	Stature and height sitting.	Weight and height sitting.	Stature and length of head.	Stature and width of head.	Height sitting and length of head.	Height sitting and width of head.	Weight and length of head.	Weight and width of head.	Length and width of head.
7	0.78	0.81	0.69	0.37	0.22	0.39	0.28	0.44	0.28	0.21	0.73	0.74	0.63	0.30	0.21	0.31	0.22	0.37	0.39	0.23
8	.73	.81	.67	.40	.23	.40	.29	.42	.28	.20	.76	.79	.68	.36	.15	.35	.13	.47	.33	.23
9	.75	.81	.68	.39	.24	.39	.29	.39	.33	.20	.80	.82	.71	.35	.16	.35	.15	.39	.32	.28
10	.81	.82	.80	.37	.28	.39	.28	.41	.33	.19	.83	.83	.79	.37	.16	.35	.17	.40	.25	.28
11	.84	.85	.85	.35	.28	.26	.25	.43	.28	.20	.81	.84	.82	.37	.25	.35	.23	.35	.27	.26
12	.81	.89	.85	.35	.27	.25	.23	.40	.28	.19	.77	.82	.80	.38	.27	.39	.25	.43	.31	.28
13	.81	.90	.83	.36	.21	.29	.19	.41	.30	.26	.73	.83	.77	.38	.37	.42	.34	.46	.41	.32
14	.81	.89	.80	.33	.24	.34	.26	.42	.35	.21	.67	.82	.69	.30	.25	.35	.31	.41	.38	.32
15	.80	.85	.75	.37	.39	.36	.22	.52	.38	.25	.65	.79	.69	.22	.22	.33	.27	.37	.36	.36
16	.69	.80	.66	.31	.25	.28	.24	.46	.38	.20	.60	.74	.60	.25	.10	.22	.15	.37	.31	.33

We have not plotted the variations of the correlations of head measurements, because these changes are too small and too uncertain. All the others show very clearly a rise of correlation during the period of rapid growth, followed by a decline during the period of decreasing growth. In accordance with the earlier periods of rapid growth and of decreasing growth the correlations of girls reach their maxima a year or two before those of boys, and it appears that the absolute maxima of correlations of boys are greater, corresponding to their absolutely greater rapidity of growth during the prepubertal period. As a consequence the values of the coefficients of correlation for girls are always a trifle lower than those of boys, except about the eighth, ninth, and tenth years.

The correlations of the head may be considered as a whole, and we have taken the averages for all the years.

TABLE V.—*Correlations of head measurements with stature, height sitting, and weight.*

	Length of head.		Width of head.	
	Boys.	Girls.	Boys.	Girls.
Stature.....	0.37	0.33	0.25	0.21
Height sitting.....	.32	.34	.25	.22
Weight.....	.43	.41	.32	.33

It seems very doubtful that the slight excess in the correlations for boys is significant. The striking excess of the correlations between measurements indicative of bulk of body and length of head over those between measurements of bulk of body and width of head may be due in part to the variations in size of the frontal sinuses and of the occipital protuberance, which depend more closely upon the development of the skeleton than the transversal diameter. However, it might seem that, in young children at least, other causes must be looked for to account for the considerable difference between the coefficients. It is quite probable that it is mainly an expression of the closer correlation of antero-posterior measurements among themselves, the length of head being an axial measurement, the same as stature and height sitting.

Since, owing to the insufficient number of cases, the numerical results of the Worcester series are not quite satisfactory, we decided to calculate the same data from a more extended series, from which we selected the fifth, seventh, tenth, thirteenth, and sixteenth years as representative values. The calculations were made from measurements taken in Toronto and Milwaukee. The results are given in the following tables:

TABLE VIa.—Averages and variabilities of measurements of boys.

Age.	City.	Stature.			Weight.			Height sitting.		
		Average.	σ .	Cases.	Average.	σ .	Cases.	Average.	σ .	Cases.
5	Milwaukee	1,069	± 45	300	41.3	± 4.2	301	592	± 26	297
	Worcester	1,179	± 50	203	49.7	± 5.9	202	642	± 28	203
7	Toronto	1,164	± 51	990	48.7	± 5.3	930	642	± 31	915
	Milwaukee	1,166	± 49	641	48.9	± 5.1	632	635	± 26	641
10	Worcester	1,329	± 59	252	65.8	± 8.5	221	711	± 31	228
	Toronto	1,311	± 61	890	64.0	± 7.5	878	700	± 32	853
13	Milwaukee	1,313	± 61	553	65.0	± 8.4	545	699	± 30	553
	Worcester	1,479	± 77	253	86.9	± 15.7	214	771	± 39	224
16	Toronto	1,453	± 78	629	82.4	± 11.6	629	756	± 38	600
	Milwaukee	1,453	± 67	365	84.5	± 11.9	365	757	± 35	365
18	Worcester	1,660	± 65	120	122.6	± 17.1	93	866	± 35	116
	Milwaukee	1,648	± 76	58	121.6	± 16.8	57	855	± 46	58

TABLE VIb.—Averages and variabilities of measurements of girls.

Age.	City.	Stature.			Weight.			Height sitting.		
		Average.	σ .	Cases.	Average.	σ .	Cases.	Average.	σ .	Cases.
5...	Milwaukee	1,054	± 45	251	40.0	± 4.2	251	586	± 25	251
	Worcester	1,171	± 56	143	47.9	± 6.1	128	639	± 29	129
7...	Toronto	1,159	± 53	800	47.0	± 5.4	844	640	± 32	800
	Milwaukee	1,162	± 47	593	47.1	± 5.0	597	637	± 26	586
10...	Worcester	1,330	± 65	215	64.1	± 10.5	170	705	± 34	174
	Toronto	1,336	± 61	895	61.6	± 8.1	892	699	± 35	848
13...	Milwaukee	1,313	± 58	556	62.6	± 8.0	541	698	± 31	553
	Worcester	1,499	± 69	213	89.7	± 15.3	183	788	± 42	190
16...	Toronto	1,481	± 72	669	85.9	± 13.5	671	789	± 48	677
	Milwaukee	1,483	± 79	341	87.6	± 14.7	333	785	± 40	333
18...	Worcester	1,572	± 60	107	108.7	± 12.1	100	840	± 29	101
	Milwaukee	1,577	± 48	123	110.6	± 12.8	123	843	± 37	103

TABLE VIIa.—Coefficients of correlation.

Age.	City.	Stature—Weight.				Stature—Height sitting.				Weight—Height sitting.			
		Boys.		Girls.		Boys.		Girls.		Boys.		Girls.	
		r	Cases.	r	Cases.	r	Cases.	r	Cases.	r	Cases.	r	Cases.
5...	Milwaukee	0.69	(296)	0.60	(250)	0.73	(296)	0.77	(250)	0.69	(296)	0.51	(250)
	Worcester	.78	(202)	.71	(128)	.81	(205)	.74	(129)	.79	(202)	.69	(128)
7...	Toronto	.70	(930)	.76	(802)	.76	(910)	.73	(800)	.70	(896)	.63	(802)
	Milwaukee	.75	(632)	.73	(585)	.84	(641)	.85	(586)	.74	(632)	.71	(586)
10...	Worcester	.83	(221)	.82	(170)	.80	(228)	.84	(174)	.82	(221)	.77	(170)
	Toronto	.76	(875)	.78	(885)	.78	(853)	.79	(852)	.67	(863)	.63	(848)
13...	Milwaukee	.79	(546)	.83	(546)	.80	(553)	.93	(553)	.77	(545)	.77	(541)
	Worcester	.74	(214)	.70	(183)	.90	(224)	.80	(190)	.81	(214)	.72	(183)
16...	Toronto	.90	(829)	.78	(671)	.80	(690)	.72	(675)	.73	(603)	.65	(670)
	Milwaukee	.83	(359)	.77	(329)	.95	(365)	.85	(333)	.82	(355)	.73	(332)
18...	Worcester	.71	(93)	.65	(100)	.79	(116)	.71	(101)	.67	(93)	.71	(100)
	Milwaukee	.81	(58)	.51	(108)	.83	(58)	.62	(108)	.80	(57)	.44	(108)

The averages for each year give us the following results:

TABLE VIIb.

Age.	Stature—Weight.		Stature—Height sitting.		Weight—Height sitting.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
5	0.69	0.60	0.73	0.77	0.69	0.51
7	.74	.72	.80	.77	.74	.68
10	.79	.81	.79	.85	.75	.72
13	.82	.75	.68	.79	.79	.70
16	.76	.58	.81	.66	.74	.57

It will be noticed that the more extensive material agrees well with the measurements collected in Worcester. The averages for the values of $R\mu_1\mu_2$ and of d_1d_2 (see Table III, p. 28) give us the following results:

TABLE VIIc.

Age.	Stature—Weight.				Stature—Height sitting.				Weight—Height sitting.			
	Boys.		Girls.		Boys.		Girls.		Boys.		Girls.	
	$R\mu_1\mu_2$.	d_1d_2 .	$R\mu_1\mu_2$.	d_1d_2 .	$R\mu_1\mu_2$.	d_1d_2 .	$R\mu_1\mu_2$.	d_1d_2 .	$R\mu_1\mu_2$.	d_1d_2 .	$R\mu_1\mu_2$.	d_1d_2 .
5	122				73							
7	203	200	222	200	110	160	118	110	109	84	111	88
10	390	288	479	300	150	101	168	115	190	126	217	138
13	798	600	796	470	245	174	208	134	392	290	440	274
16	920	310	390	33	235	69	105	15	490	197	210	42

We may say, therefore, that increases of the values of correlations take place during the period of growth, in accordance with the demands of our theory of variability in period of development, although the correspondence between theory and observation can not be definitely determined unless we know the amount of the variability in period σ_7 , which, as appears from equation (1), determines the value of $R\mu_1\mu_2$. It seems, therefore, necessary to determine the values of σ_7 .

Considering this problem from a general point of view, it will be seen that σ_7 is the variability of period at which a certain physiological stage of development is attained. We may investigate this variability by means of various groups of physiological data. We may, for instance, determine the variability of the period of pregnancy, of the phases of first and second dentition, of puberty, and of the appearance of the wisdom teeth. In later life we may also include the menopause and death by arterial diseases.

Unfortunately it is not easy to obtain satisfactory statistics relating to these phenomena; statistics relating to the exact period of teething are particularly unsatisfactory. We have collected data of this description, and the following pages contain the results of our inquiries.

Pregnancy.—Schlichting^a gives the following table for the period of gestation:

^aArchiv für Gynæcologie, XVI, p. 2210.

TABLE VIII.—*Period of pregnancy.*

Weeks.	Cases.	Weeks.	Cases.
34.....	3	42.....	18
35.....	18	43.....	10
36.....	16	44.....	3
37.....	53	45.....	3
38.....	77	46.....	1
39.....	118	47.....	1
40.....	100	48.....	1
41.....	35		

Average 38.49 weeks, or 269.4 ± 13.4 days.

Dentition.—Whitehead^a gives the following table for the appearance of the inner pair of incisors in well-nourished children.

TABLE IXa.—*Appearance of first pair of incisors.*

Months.	Cases.	Months.	Cases.
2.....	8	8.....	98
3.....	49	9.....	81
4.....	85	10 ^a	42
5.....	85	11 ^a	22
6.....	175	12 ^a	13
7.....	100	13 ^a	5

^a Interpolation.

Average 7.15 ± 2.51 months.

Most of the other tables are given in a form which makes it difficult to determine the average age and its variability directly. In these cases Pearson's method of curve fitting^b has been applied in a somewhat simplified form, which seems satisfactory owing to the small number of available observations. The method adopted will be illustrated by our treatment of Woronichin's tables.^c He gives the following data for well-nourished children, indicating the percentile frequency of the appearance of the inner incisors at various ages.

TABLE IXb.—*Percentage of children that have teeth.*

Months.	Per cent.	Months.	Per cent.
3.....	0.73	8.....	53.65
4.....	2.85	9.....	69.84
5.....	8.34	10.....	73.60
6.....	16.80	11.....	92.80
7.....	33.68	12.....	82.60

Assuming that the actual variability of time follows the laws of chance, we can determine from the tables of the probability integral the multiples of corresponding to their frequencies. Using W. F. Sheppard's tables,^d we find, for instance, for the age of 7 months, that the value of 0.3368 corresponds to the

^a L. Fleischmann. Klinik der Pädiatrik, II, p. 76.

^b Biometrika, Vol. I, pp. 265 et seq. Vol. II, pp. 1 et seq.

^c Fleischmann, p. 77.

^d Biometrika, Vol. II, pp. 174 et seq.

sum total of frequencies under the value of $A - 0.42\sigma$, where A is the average, σ the standard variability. We may, therefore, write the equation—

$$7 = A - 0.42\sigma.$$

In the same way we find—

$$6 = A - 0.96\sigma.$$

Any two equations of this kind would give us a pair of values of A and σ , from all of which the most probable value may be calculated.

For the purpose of this calculation we will write, in place of the actual month, the middle month—in our case 8.0—plus or minus such differences as will give us each particular month. If we call these differences x , the middle month M , and the multiples of σ found from the table of the probability integral y , we can write our equations—

$$\begin{aligned} M + x &= A + y\sigma, \\ A - M &= x - y\sigma. \end{aligned} \quad (2).$$

or by taking the average of these equations for all our observations we find, since $[x] = 0$

$$A - M = -[y]\sigma. \quad (3).$$

By multiplying (2) by x , we find

$$(A - M)x = x^2 - yx\sigma, \text{ and taking the average, } [yx]\sigma = [x^2]. \quad (4).$$

(3) and (4) give us satisfactory values for A and σ .

Applying this to Table IXb (p. 32), we find the following multiples of σ corresponding to the percentile frequencies.

Months.	x	y	xy
3.....	-4.5	-2.44	10.98
4.....	-3.5	-1.90	6.65
5.....	-2.5	-1.38	3.45
6.....	-1.5	-.96	1.44
7.....	-.5	-.42	.21
8.....	+.5	+.09	.04
9.....	+1.5	+.52	.78
10.....	+2.5	+.63	1.57
11.....	+3.5	+1.46	5.11
12.....	+4.5	-.94	4.05

$$[y] = -0.346 \quad [xy] = 3.428 \quad [x^2] = 8.25.$$

$$\sigma = \pm 2.41$$

$$A - M = +0.83$$

If the table signifies that each group embraces children of from 3 to 4, 4 to 5, 5 to 6, etc., months of age, this would give us an average of 8.83 months. The values for y which correspond to the lowest and highest percentages are, of course, very uncertain, and must be given in an exact calculation a very low weight, in accordance with the uncertainty of the values of y .

The available material for the calculation of the time and variability of the appearance of the first molars is still more unsatisfactory. Fleischmann^a gives the following data:

^a Dr. L. Fleischmann, Klinik der Pädiatrik, II. Der erste Zahndurchbruch des Kindes, p. 82.

TABLE X.—*Number of children having four molar teeth.*

Age (months).	Cases observed.	Cases having 4 molars.
6-7	83	-----
8-9	61	-----
10-11	53	2
12-13	67	1
14-15	65	10
16-17	40	18
18-19	51	23

Calculated in the same manner as the preceding table, we find the average age 18.8 ± 3.7 months.

For the second dentition we have utilized a series of plaster casts of palates of normal children collected by Dr. Walter Channing. These give for the upper teeth the following results:

TABLE XIa.—*Number of children having permanent teeth.*

Age.	Boys.							Girls.						
	Cases.	Inner incisors.	Outer incisors.	Canines.	Bicuspid.	First molars.	Second molars.	Cases.	Inner incisors.	Outer incisors.	Canines.	Bicuspid.	First molars.	Second molars.
6	23	7	1	-----	-----	15	-----	46	18	4	3	7	38	1
7	30	12	2	1	1	25	-----	39	31	11	1	16	36	-----
8	27	22	7	-----	5	27	-----	31	26	15	3	14	29	2
9	40	39	27	-----	12	40	3	42	42	25	4	19	42	1
10	33	33	21	11	22	33	1	34	32	23	5	25	34	3
11	21	21	20	13	21	21	2	30	29	29	22	25	30	6
12	21	21	21	18	21	21	8	22	22	19	19	22	22	7
13	12	12	12	11	12	12	8	16	16	14	14	16	16	11
14	12	12	12	12	12	12	9	9	9	8	8	9	9	8
15	-----	-----	-----	-----	-----	-----	-----	7	7	7	7	7	7	7

TABLE XIb.—*Percentage of children having permanent teeth.*

Age.	Boys.						Girls.					
	Inner inci- sors.	Outer inci- sors.	Ca- nines.	Bicu- s-pids.	First mo- lars.	Sec- ond mo- lars	Inner inci- sors.	Outer inci- sors.	Ca- nines.	Bicu- s-pids.	First mo- lars.	Sec- ond mo- lars.
6	30	4			65		38	9	6	15	83	2
7	40		3	3	83		79	28	2	41	92	
8	81	26		19	100		84	48	9	45	93	6
9	97	67		30	7	100	100	59	9	45	100	2
10	100	63	33	66	3		94	82	14	73		8
11		95	61	100	9		96	96	73	83		20
12		100	85		38	100	100	86	86	100		32
13			91		66			88	88			68
14			100		75			90	90			90
15								100	100			100

These tables give for the appearance of the permanent teeth the following averages and variabilities:

	Boys.	Girls.
Inner incisors	7.5±1.4	7.0±1.6
Outer incisors	9.5±2.1	8.9±2.1
Bicuspsids	9.8±1.6	9.0±2.8
Canines	11.2±1.4	11.3±1.0
Second molars	13.2±2.0	12.8±1.6

For the time of appearance of the wisdom teeth Magitot's tables ^a are available. He gives the following distribution for the time of appearance of the wisdom teeth:

TABLE XIIa.—*Appearance of wisdom teeth.*

Age.	Men.	Women.
18	9	22
19	10	18
20	36	38
21	50	62
22	53	46
23	45	51
24	31	12
25	6	10
Total	241	259

We may assume that the number of examined individuals for these ages was nearly equal, and on account of the uncertainty of the distribution we may disregard the cases outside of the limits of 18 and 25 years. If the ages mean those between one birthday and the next birthday, the averages and variabilities will be, for men, 22.2±1.7 years, and for women, 21.8±1.8 years.

Statistics which Dr. G. Meylan had the kindness to collect at our request in the gymnasium of Columbia University give the following numbers:

TABLE XIIb.—*Presence of wisdom teeth.*

Ages.	Cases.	Wisdom teeth present.	Per cent.
16	1	—	—
17	20	7	35
18	44	14	32
19	47	25	53
20	29	25	86
21	18	15	83
22	13	13	100
23	6	6	100
24	8	8	100
25	5	3	60
26	—	—	—
27	3	2	67

Average, 19.3±2.1 years.

^a Bul. de la Soc. d'Anthropologie de Paris, 1879, p. 156.

Puberty.—We have collected the following statistics of the beginning of menstruation:

TABLE XIII.—*Beginning of menstruation.*

Age.	St. Petersburg (Weber). ^a	America (Roberts). ^b	America (Starbuck). ^c	London. ^d	London. ^d	Paris. ^d	Italy, country (Roberts). ^b	Italy, wealthy. ^b
5						1		
6								
7						1		
8				1		2		
9			1	4	14	19		
10	10	1	1	5	55	29	1	1
11	70	5	7	53	67	93	2	4
12	171	9	9	90	123	105	8	14
13	415	18	27	183	210	132	14	27
14	556	25	39	263	311	104	17	20
15	453	20	22	291	320	190	19	15
16	348	14	6	234	264	141	17	8
17	200	3	5	181	158	127	10	5
18	77	3	2	105	112	90	8	3
19	40	1		45	42	35	2	2
20	16	1		26	29	30	2	1
21	8			8	9	8		
22	5			3	4	8		
23				2	1	5		
24	2							
25				1				
	15.1±1.87	14.7±1.73	14.3±1.56	15.6±2.1	14.3±2.2	15.3±2.7	15.5±2.0	14.5±1.9

^a Ploss. *Das Weib*, 1899, I, p. 327.

^b *The Lancet*, July 25, 1885.

^c *Psychology of Religion*, p. 40.

^d *Journal of Medical Science*, Edinburgh, 1850, Vol. XI, pp. 289-296.

Menopause.—Weber^a gives the following statistics for St. Petersburg for the percentile frequency of the occurrence of the menopause, the total number of his observations being 578.

TABLE XIV.—*Occurrence of menopause.*

Years.	Per cent.
30-35	4.6
35-40	14.0
40-45	28.0
45-50	41.4
50-55	12.0

Average, 44.5±5.3 years.

Deaths due to arterial diseases.—Finally, we have tried to calculate the variability of the time of occurrence of deaths due to the phenomena of senility. The most available groups of deaths seemed to be those due to arterial diseases. Doctor Wissler has made an approximate calculation of the distribution of deaths due to arterial diseases in Paris, the method and calculation being contributed by him. He summarizes his results as follows:

The statistics of Paris for 1896 give the number of deaths from arterial affections; ^b but the values must be reduced to the frequencies of deaths for a given number of individuals. For example, the number of males dying of this class of

^a See Ploss. *Das Weib*, 1899, I, p. 578.

^b *Annuaire Statistique de la Ville de Paris*, XVII^e Anné, 1896.

diseases at the age from 45 to 49 is 15; the total number of deaths of males from all causes for the same ages, 1,763, and the total number of living males, 80,952. For the succeeding years of life the corresponding numbers will be taken from a different group of individuals and can not be compared to the foregoing until both are reduced to the same base. Hence, a table of the frequencies of death at the successive ages must be based upon the life history of a definite number of individuals. If we begin with 1,000 individuals born at the same time and record the deaths from year to year until all are dead, we obtain a series of numbers expressing the relative age frequencies of death. Statistics of this sort are obviously difficult to obtain, and it is customary to calculate their values from the death rates of successive ages. The French mortality tables used in life insurance give the probable number of deaths during each five years of life. These are calculated from the formula

$$l_2 = l_1 - 5d \frac{l_1 + l_2}{2},$$

in which l_1 = the number living; d , the annual death rate for the period; l_2 , the number of survivors at the end of the period.^a

According to this method the total mortality table for males in Paris in 1896 was calculated, beginning with 1,000 individuals 10 years of age. In the following table the first column gives the number of survivors for the successive age periods and the second column the number of deaths. Since in the vital statistics of Paris all over 80 years of age are grouped together, it was necessary to make an approximate distribution for these ages based upon the general mortality tables for France. The ratio of the number of deaths due to affections of the arteries to the total number of deaths for each age period enables us to calculate the relative number of deaths from these diseases annually for over 1,000 males. These values are given in the third column of our table:

TABLE XV.—*Mortality table for arterial diseases.*

Age.	Survivals.	Total deaths.	Deaths from arterial diseases.
10.....	1,000	-----	-----
10-14.....	997	3	-----
15-19.....	965	32	0.05
20-24.....	924	41	.13
25-29.....	888	36	.00
30-34.....	838	50	.10
35-39.....	778	60	.14
40-44.....	712	66	.30
45-49.....	641	71	.61
50-54.....	562	79	.60
55-59.....	464	98	.87
60-64.....	363	101	1.13
65-69.....	262	101	1.44
70-74.....	167	95	1.26
75-79.....	79	88	.50
80-84.....	41	38	.35
85-89.....	8	33	.30
90-94.....	1	7	.06
95-99.....	0	1	.01

Average, 62.55 ± 13.2 .

In his discussion of the chances of death,^a Karl Pearson has dissected the general mortality curve into five component elements, giving probabilities of

^a E. Dormoy: *Théorie Mathématique des Assurances sur la Vie*.

^b *The Chances of Death*, I, p. 26.

death for infancy, childhood, youth, middle life, and old age. He gives the following variabilities for the time of death:

Infancy	± 0.943
Childhood	± 3.52
Youth	± 7.80
Middle life	± 12.80
Old age	± 13.40

The last of these agrees well with the results obtained from Doctor Wissler's discussion of deaths due to arterial diseases.

From the material that has been given the following results for the variabilities of development in various periods of life have been obtained.

TABLE XVI.—*Variabilities of age.*

Age (years).	Observation.	Variability.
0.....	Pregnancy	± 0.04
0.6.....	First incisors	± 0.21
1.6.....	First molars	± 0.31
7.....	Inner permanent incisors, girls	± 1.6
7.5.....	Inner permanent incisors, boys	± 1.4
8.9.....	Outer permanent incisors, girls	± 2.1
9.....	Bicusps, girls	± 2.8
9.5.....	Outer permanent incisors, boys	± 2.1
9.8.....	Bicusps, boys	± 1.6
11.2.....	Permanent canines, boys	± 1.4
11.3.....	Permanent canines, girls	± 1.0
12.8.....	Second molars, girls	± 1.6
13.2.....	Second molars, boys	± 2.0
14.9.....	Puberty, girls	± 2.01
19.3.....	Wisdom teeth, boys	± 2.1
22.....	Wisdom teeth, girls	± 1.8
44.5.....	Menopause	± 5.3
62.5.....	Death due to arterial diseases, men	± 13.2

From these data it appears clearly that there is an increase in variability of the time at which certain stages of development are reached. In our series a variety of physiological phenomena have been considered and all give similar results. It must, of course, not be supposed that all the different phenomena must necessarily give the same results, since each of them must be affected by certain peculiar conditions aside from the general variability of development that is characteristic of the whole series. It does not appear clearly from the available material whether there is a difference in this respect between the two sexes.

It is interesting to see that a similar increase in variability takes place in the grouping of children according to mental maturity. This may be observed in the arrangement of children of the same age in different grades in school. In Worcester, for instance, the following distribution was observed.

TABLE XVII.—*Distribution of girls of various ages in school.*

Age.	Grade.									Total number.	Average grade.	Variability.
	1.	2.	3.	4.	5.	6.	7.	8.	9.			
9.....	4	26	51	66	5	---	---	---	---	152	3.8	± 0.9
10.....	---	7	28	77	60	20	---	---	---	192	4.8	± 1.0
11.....	---	3	19	53	78	53	12	1	---	219	5.4	± 1.1
12.....	---	---	5	31	47	79	43	23	6	234	6.4	± 1.3
13.....	---	---	1	10	26	50	47	39	13	186	7.1	± 1.4

It is not surprising to find that these variabilities are less than those obtained from physiological data, since the grading in schools involves not only phenomena of acceleration and retardation, but also a selective grouping.

The peculiar distribution of measurements of children of the same age, but in different grades, to which Porter first called attention, are of such a character that the children who are retarded in grade are also retarded in *all* their physical measurements. They are not simply short or light-weight children of their particular age, but all their measurements correspond to those of younger children, while the measurements of children who are ahead of their age correspond to measurements of older children. The same phenomena are brought out by our Worcester series.

TABLE XVIII.—*Statures of girls of the same ages in different grades.*

Age.	Grades.							
	1.	2.	3.	4.	5.	6.	7.	8.
7	1,139±51 43	1,187±42 53	1,191±47 17	-----	-----	-----	-----	-----
8	1,182±50 16	1,209±47 57	1,229±53 50	1,273±56 20	-----	-----	-----	-----
9	-----	1,247±52 26	1,293±53 51	1,282±47 66	-----	-----	-----	-----
10	-----	-----	1,398±56 28	1,340±61 77	1,347±68 69	1,364±60 20	-----	-----
11	-----	-----	1,336±43 19	1,360±61 53	1,376±63 78	1,390±65 53	1,409±70 12	-----
12	-----	-----	-----	1,420±59 31	1,445±71 47	1,433±66 79	1,459±74 43	1,489±48 23
13	-----	-----	-----	-----	1,478±72 26	1,487±63 50	1,490±55 47	1,533±68 39

It will be seen from Table XVII that the correlation between age and grade is very close. Table XVIII gives the following average ages and average variabilities of stature for each grade:

	Grades.							
	1.	2.	3.	4.	5.	6.	7.	8.
Age	7.7	8.3	9.4	10.5	11.7	12.3	12.8	13.6
Variability of stature	±51	±47	±51	±57	±68	±63	±66	±58

In this series the variabilities increase on the whole in the same manner as in the general Table Ib. This correspondence becomes still clearer when we consider each measurement as corresponding to the age to which it would belong according to Table Ib. If we interpolate in Table Ib for 1139 for stature, we find the age of 6.9 years as corresponding to the average stature. Thus we can substitute for Table XVIII the following table of ages:

Age.	Grades.							
	1.	2.	3.	4.	5.	6.	7.	8.
7	6.9	7.8	7.9	-----	-----	-----	-----	-----
8	7.7	8.3	8.9	9.5	-----	-----	-----	-----
9	-----	9.0	9.4	9.7	-----	-----	-----	-----
10	-----	9.9	10.1	10.7	10.9	11.3	-----	-----
11	-----	-----	10.6	11.2	11.5	11.7	12.0	-----
12	-----	-----	-----	12.2	12.5	12.4	12.8	13.3
13	-----	-----	-----	-----	13.1	13.3	13.3	14.4

If we arrange the variabilities for the grades and ages in accordance with this table of ages corresponding to statures, and smooth the series, which seems necessary on account of the small number of observations, we find:

Age.	Variability.	Smoothed.	Average per year.	Variabilities of girls (Table Ib).	Variabilities of American girls. ^a
6.9.....	51	48	49	56	52
7.7.....	50	46			
7.8.....	42	47			
7.9.....	47	49	50	58	56
8.3.....	47	51			
8.9.....	53	54			
9.0.....	52	58	53	54	57
9.4.....	58	55			
9.5.....	56	52			
9.7.....	47	52	57	65	62
9.9.....	54	51			
10.1.....	56	53			
10.6.....	43	61	62	64	68
10.7.....	61	63			
10.9.....	68	63			
11.2.....	61	66	68	72	76
11.3.....	60	70			
11.5.....	63	65			
11.7.....	65	65	62	69	74
12.0.....	70	72			
12.2.....	59	74			
12.4.....	66	65	62	69	74
12.5.....	71	61			
12.8.....	74	55			
13.1.....	72	62	62	69	74
13.3.....	48	65			
13.3.....	63	62			
13.3.....	65				
14.4.....	68				

^a See F. Boas, "Growth of Toronto children," Rep. Com. of Education, 1896-97, p. 1556.

Thus it appears that the position of a child in the grades conforms in regard to its measurements and variabilities strictly to the values which would result if its age were considered as variable, so that we find in these observations a good confirmation of our general theory. It would be interesting to know whether the physiological data discussed before have a similar relation to the measurement of the body, as we found in the mental variations. Unfortunately no material bearing upon this point is available.

The data collected in Table XVI can be expressed approximately by the formula—

$$\sigma_t = 0.23t - 0.06t^2, \text{ which can be used for } t < 20 \text{ years.}$$

This formula gives us the following variabilities:

TABLE XIXa.

Age.	σ_t	Age.	σ_t	Age.	σ_t
5.....	1.00	11.....	1.81	17.....	2.18
6.....	1.16	12.....	1.90	18.....	2.20
7.....	1.32	13.....	1.98	19.....	2.20
8.....	1.46	14.....	2.04	20.....	2.20
9.....	1.56	15.....	2.10		
10.....	1.70	16.....	2.14		

We may also determine a maximum value for this variability from our table of growth. If the variability of stature during the period of growth were due entirely to acceleration and retardation—an assumption which can be

even approximately correct only during the early years of childhood—we may use our formula on page 26.

$$\mu_1^2 = d_1^2 \sigma_1^2 - \sigma_1^2$$

In accordance with the present assumption, σ_1 would disappear, and we have

$$\mu_1 = d_1 \sigma_1$$

We have used the tables published in F. Boas's paper on the "Growth of Toronto children,"^a which have been smoothed graphically (figs. 2 and 3, p. 48) and which may be summarized in the following table:

TABLE XIXb.

Age interval.	Boys.			Girls.		
	Increment of stature.	Variation.	σ_1 .	Increment of stature.	Variation.	σ_1 .
5-6	56	± 44	± 0.8	57	± 46	± 0.8
6-7	53	± 47	$\pm .9$	54	± 48	$\pm .9$
7-8	50	± 50	± 1.0	52	± 50	± 1.0
8-9	48	± 53	± 1.1	49	± 55	± 1.1
9-10	46	± 55	± 1.2	50	± 55	± 1.2
10-11	44	± 57	± 1.3	53	± 60	± 1.2
11-12	45	± 62	± 1.4	59	± 66	± 1.2
12-13	53	± 66	± 1.3	62	± 74	± 1.2
13-14	64	± 75	-----	48	± 72	± 1.4
14-15	73	± 85	-----	30	± 66	-----
15-16	54	± 86	-----	15	± 59	-----
16-17	37	± 73	-----	8	± 53	-----
17-18	24	± 71	-----	4	± 56	-----
18-19	14	± 66	-----	1	± 56	-----
19-20	7	± 66	-----	-----	-----	-----
20-21	3	± 66	-----	-----	-----	-----
21-22	1	± 66	-----	-----	-----	-----

A comparison between Tables XIXa and XIXb shows a fair close correspondence, and suggests that, for stature at least, the variabilities obtained from observations on dentition and puberty give too high results. This may be seen also from a consideration of the physical development of children of 15 years, for instance. If the variability were as high as 2.1, as indicated by the data on dentition, there would be an appreciable number of individuals whose development would correspond to the stages of 10 and 20 years, which is obviously not true. Similar maximum values may be derived from Table III by disregarding for the early years of childhood the value of $r\sigma_1\sigma_2$ of equation (1) on page 26. Then we have—

$$R\mu_1\mu = d_1d_2\sigma_1\sigma_2.$$

Thus we find the following values for σ_1 :

Age.	Boys.				Girls.			
	Derived from—			Average.	Derived from—			Average.
	Stature—Weight.	Stature—Height sitting.	Weight—Height sitting.		Stature—Weight.	Stature—Height sitting.	Weight—Height sitting.	
6	1.4	1.4	1.6	1.5	0.7	0.7	0.9	0.8
7	1.1	1.1	1.4	1.2	1.3	1.2	1.4	1.3
8	1.0	1.1	1.8	1.3	1.2	1.5	1.2	1.3
9	1.0	1.1	1.2	1.1	1.1	1.0	1.3	1.1
10	1.4	1.5	1.7	1.5	1.9	1.6	2.0	1.8
11	1.6	2.2	2.5	2.0	1.2	1.3	1.4	1.3
12	1.6	1.8	2.1	1.8	1.1	1.0	1.3	1.2
13	1.5	1.6	1.7	1.6	1.5	1.6	1.6	1.6

^a L. c., pp. 1555, 1556.

The irregularity of distribution in this table is not surprising, since the series from which the values were obtained is very brief.

We infer from all this that the variability must be assumed as lower than the one obtained from dentition. Although the amount of this variability is uncertain, it seems worth while to calculate its approximate effect upon the course of growth. If the number of retarded individuals is designated by n_t and the stature for each period by s_t , we have for s'_t , or the average observed stature at the period t

$$s'_t = \frac{1}{n} \sum n_t s_t = s'_t + \sum n_t (s_t - s'_t)$$

The values of n_t may be taken from the probability integral.

For $\sigma_t = \pm 1.5$ we obtain the following values for s_t :

$$s_t = s'_t +$$

Age.	Boys.	Girls.	Age.	Boys.	Girls.
11.....	- 9	+ 3	17.....	+19	+6
12.....	-13	+19	18.....	+14	+3
13.....	- 3	+27	19.....	+ 9	
14.....	+20	+25	20.....	+ 5	
15.....	+25	+16	21.....	+ 2	
16.....	+22	+10			

Thus we obtain for the probable values for typical statures:

TABLE XX.

Age.	Boys.			Girls.		
	Typical stature.	Increment.	Observed average.	Typical stature.	Increment.	Observed average.
11.....	1,351	-----	1,360	1,369	-----	1,365
12.....	1,392	41	1,405	1,444	75	1,427
13.....	1,455	63	1,458	1,514	70	1,485
14.....	1,542	87	1,522	1,560	46	1,535
15.....	1,621	79	1,595	1,581	21	1,565
16.....	1,673	52	1,649	1,590	9	1,580
17.....	1,705	32	1,686	1,594	4	1,588
18.....	1,724	19	1,710	1,595	1	1,592
19.....	1,733	9	1,724	1,595	-----	1,595
20.....	1,736	3	1,731	-----	-----	-----
21.....	1,736	-----	1,734	-----	-----	-----

The theory of the variability of period of development explains a number of peculiarities of growth. It is evident that children of accelerated development, at the beginning of the period of rapid increase in the rate of growth, must show for several years high rates of growth, while the retarded children, who have not reached the period of acceleration, must show low rates of growth. In other words, there must be a strong positive coefficient of correlation between stature and rate of growth, and also between the rate of growth of one year and that of the next year. Later on, when growth is nearly completed, those who are in advance will have nearly completed their growth, while those who are retarded and therefore short will continue to grow rapidly. In other words, the period of a high positive correlation must be followed by one of negative correlation. The existence of such correlation was pointed out by F. Boas in his report on

the "Growth of Toronto children" ^a and, later on, by Clark Wissler, ^b In the following tables we give the data on these correlations calculated in accordance with Pearson's methods. The calculations were made by Mr. William S. Kahnweiler and revised by Dr. Wissler. We designate, as before, by s_t the measurement at the period t ; by σ_t its variability; by d_t the increment during the interval t and $t+1$; by σ_d the variability of the increment; by r_t the coefficient of correlation between s_t and d_t ; and by n the number of cases.

TABLE XXI.—Correlations of measurements and their increments.

STATURE.

Age.	Boys.						Girls.					
	s_t	σ_t	d_t	σ_d	r_t	n	s_t	σ_t	d_t	σ_d	r_t	n
5							1,071	± 46	58	± 8	+0.15	16
6							1,114	± 45	59	± 9	+ .44	39
7	1,127	± 43	57	± 6	+0.25	42	1,177	± 53	55	± 11	+ .14	46
8	1,155	± 44	53	± 9	+ .11	62	1,214	± 43	55	± 9	+ .24	53
9	1,232	± 45	49	± 9	+ .08	64	1,270	± 48	57	± 12	+ .47	51
10	1,274	± 55	51	± 10	+ .25	79	1,318	± 64	62	± 17	+ .18	76
11	1,332	± 51	50	± 9	+ .18	73	1,367	± 61	72	± 22	+ .18	83
12	1,368	± 64	47	± 12	+ .18	71	1,446	± 73	65	± 20	+ .42	69
13	1,427	± 64	59	± 18	+ .48	77	1,497	± 65	54	± 27	+ .39	49
14	1,473	± 68	75	± 24	+ .29	63	1,538	± 77	33	± 25	+ .63	35
15	1,559	± 95	62	± 30	+ .42	32	1,572	± 42	17	± 11	+ .11	16
15	1,622	± 94	52	± 33	+ .44	17						

HEIGHT SITTING.

Age.	s_t	σ_t	d_t	σ_d	r_t	n	s_t	σ_t	d_t	σ_d	r_t	n
5							589	± 24	25	± 17	+0.60	17
6	618	± 28	25	± 15	+0.51	42	618	± 29	24	± 18	+ .32	39
7	639	± 29	19	± 12	+ .25	64	638	± 24	29	± 16	+ .15	44
8	666	± 27	21	± 17	+ .07	66	656	± 24	22	± 19	+ .16	53
9	684	± 29	24	± 14	+ .12	78	683	± 29	27	± 14	+ .02	52
10	712	± 27	25	± 12	+ .05	73	699	± 33	32	± 17	+ .01	76
11	719	± 32	24	± 15	+ .17	70	724	± 35	37	± 19	+ .15	83
12	744	± 33	35	± 19	+ .22	76	757	± 34	42	± 14	+ .16	69
13	765	± 31	46	± 16	+ .04	62	786	± 36	40	± 20	+ .42	49
14	804	± 50	44	± 16	+ .41	32	803	± 51	31	± 19	+ .43	35
15	839	± 39	42	± 24	+ .05	17	829	± 21	20	± 16	+ .03	16

WEIGHT.

Age.	s_t	σ_t	d_t	σ_d	r_t	n	s_t	σ_t	d_t	σ_d	r_t	n
5							40.1	± 4.4	4.5	± 1.0	+0.54	17
6	45.9	± 4.1	4.9	± 1.8	+0.56	41	43.6	± 4.2	4.2	± 2.4	+ .11	39
7	48.1	± 5.2	4.8	± 1.7	+ .11	63	48.2	± 6.7	5.0	± 3.3	+ .45	46
8	54.3	± 6.2	5.1	± 1.9	+ .48	66	51.5	± 5.4	6.1	± 4.3	+ .32	53
9	59.9	± 7.9	5.4	± 2.3	+ .12	76	59.4	± 9.4	7.1	± 4.9	+ .35	50
10	66.5	± 7.2	5.5	± 3.0	+ .77	70	62.9	± 10.7	8.0	± 4.8	+ .29	76
11	72.4	± 10.0	6.4	± 3.5	+ .56	70	69.0	± 12.0	10.0	± 4.9	+ .44	83
12	79.1	± 12.3	7.8	± 4.3	+ .72	76	78.5	± 12.8	10.5	± 4.4	+ .38	69
13	86.0	± 12.3	11.6	± 5.5	+ .22	63	90.7	± 13.8	10.9	± 4.8	+ .15	48
14	100.6	± 22.5	12.9	± 6.3	+ .37	32	97.5	± 17.5	7.7	± 5.3	+ .15	35
15	106.5	± 19.8	10.3	± 5.8	+ .25	17	108.0	± 12.0	3.9	± 3.5	+ .11	16

This table shows the expected results, a maximum of positive correlations during the periods of most rapid growth and a sudden drop to negative correlations when growth is nearly completed.

It is very peculiar that for height sitting the correlations are throughout negative. They move in approximately the same manner as those for stature and weight, but they remain negative. Since this measurement is very inaccurate, it seems desirable to investigate the influence of the error of observation.

^a L. c., pp. 1550 ff.^b American Anthropologist, new series, V, pp. 81 ff.

If we call x the variation at the age t , z the variation of the increment, and y and y' the errors of observation, we have—

$$s_t = s_t + x + y.$$

$$s_{t+1} = s_t + d + x + z + y'.$$

Therefore $d' = d + z + y' - y$.

$$\sigma_d'^2 = \sigma_d^2 + 2\varepsilon^2, \text{ when } \varepsilon \text{ the standard error of observation.}$$

$$\sigma_t'^2 = \sigma_t^2 + \varepsilon^2.$$

$$r' = \frac{[(x+y)(z+y'-y)]}{\sigma_t' \cdot \sigma_d'} = \frac{[xz] - \varepsilon^2}{\sigma_t' \cdot \sigma_d'}.$$

$$r = r' \frac{\sigma_t' \cdot \sigma_d'}{\sigma_t \cdot \sigma_d} + \frac{\varepsilon^2}{\sigma_t \cdot \sigma_d}.$$

In order to determine the value of ε , we have collected a series of measurements of children in the Horace Mann School. We took two independent measurements of the height sitting of each of 53 children, the method being intentionally inaccurate, because it seemed important to obtain a maximum value of ε . The differences between the pairs of measurements gave the error of $2\varepsilon^2$, which was found to be 65.4, and from this the value of ε was determined as ± 5.7 .

In this manner we find for the corrected coefficients of correlation for height sitting and its increments the following values:

Age.	Boys.	Girls.	Age.	Boys.	Girls.
5.....		-0.57	11.....	-0.12	-0.11
6.....	-0.59	-.23	12.....	+ .30	-.07
7.....	-.20	-.06	13.....	+ .12	-.41
8.....	+ .03	-.10	14.....	-.40	-.43
9.....	-.05	+ .05	15.....	-.01	+ .08
10.....	+ .07	+ .07			

Thus it appears that the negative character of these coefficients is not due to the errors of observation, but that there is almost throughout a tendency for long trunks to grow slowly.

Finally, we will give a table of correlations of annual increments of stature and weight, based on a series of observations which were kindly placed at our disposal by Dr. Wilson Farrand, principal of the Newark Academy, Newark, N. J., in which school the measurements were collected in the course of the last ten years. We have the records of 70 boys whose measurements were taken annually between the ages of 12 and 17 years. The calculation of the correlations between the increments of one annual interval with those of other annual intervals results in the following table:^a

TABLE XXII.—Correlations of annual increments of boys.

STATURE.

Ages.	12-13.	13-14.	14-15.	15-16.	16-17.
12-13.....	+1.00	+0.45	-0.02	-0.62	-0.70
13-14.....	+ .45	+1.00	-.04	-.56	-.66
14-15.....	-.02	-.04	+1.00	+ .43	-.03
15-16.....	-.62	-.56	+ .43	+1.00	+ .61
16-17.....	-.70	-.66	-.03	+ .61	+1.00

^a See Clark Wissler, "The growth of boys." Amer. Anthropologist, N. S., Vol. V., pp. 84, 85.

TABLE XXII.—*Correlations of annual increments of boys—Continued.*

WEIGHT.

Ages.	12-13.	13-14.	14-15.	15-16.	16-17.
12-13.....	+1.00	+0.39	-0.05	-0.43	-0.41
13-14.....	+ .39	+1.00	+ .09	- .36	- .31
14-15.....	- .05	+ .09	+1.00	+ .63	+ .01
15-16.....	- .43	- .36	+ .63	+1.00	+ .33
16-17.....	- .41	- .31	+ .01	+ .33	+1.00

It appears here clearly that the interval 14-15 years forms the dividing line between positive and negative correlations, so that at that age boys grow independently of the rate of growth of other years, while boys who grow rapidly before that time grow slightly later on, while those who grow slowly before that time grow rapidly later on.

We have in the preceding discussions considered from a number of points of view the theory that the peculiarities of growth are due to phenomena of varying rapidity of development, and we have found that all the observed facts may be adequately explained by this theory; that it conforms with the general variability in the rapidity of physiological development, which we developed from observations on gestation, dentition, puberty, senility, and mental achievement. From the data thus obtained we have determined a new curve of growth (Table XX), which gives us with the greatest approximation now attainable the typical—not the average—statures for each age.

It seems important to investigate in how far the differences in the development of various social groups are due to typical differences, and in how far they may be considered as effects of acceleration and retardation. The gradual increase in the variability of growing individuals up to the prepubertal period and its subsequent decrease, together with our proof that these phenomena may be adequately explained as phenomena of acceleration and retardation, show that retardation of development is partly made good by a longer continuation of growth, but that a complete recovery does not take place. Otherwise, the decrease of variability would be much more than what it actually is. It is true that the absolute amount of recovery can not be stated at the present time. In order to be able to do so, we require a series in which the final development of children retarded in early years would be shown. Doctor Wissler's table (see above, Table XXII) shows, however, clearly that compensation takes place in periods as far apart as four years. It seems safe to conclude that if the variabilities of various social groups should follow the same laws as those of individuals, that then their course may also be explained as due to retardation and acceleration.

In order to investigate this question, we can utilize the available observations of social groups. The typical stature of any social group may be said to be equal to the average stature of the whole people plus a certain deviation, which, in the great variety of existing social groups, follows the laws of chance, and which may be measured by the standard variability ε . An observed value, obtained from a series of n observations of a certain social group, will, furthermore, have an uncertainty measured by $\sqrt{\frac{\sigma^2}{n}}$. Therefore its deviation from the type will be measured by $\sqrt{\varepsilon^2 + \frac{\sigma^2}{n}}$. Provided that ε is sufficiently large, so that $\frac{\sigma^2}{n}$ may be disregarded in comparison to it, its value can be determined as the standard

deviation of the whole series of social groups that have been studied. We have carried out this calculation for the following groups, wherever the number of available cases was sufficiently large: Worcester, Mass.; Milwaukee (Perkham), with subdivisions of German-born children and those of all nationalities; Chicago (Smedley); Oakland, Cal.; Toronto, Ontario, with subdivisions according to the order of birth; Boston (Bowditch), with subdivisions of American nonlaboring class, American laboring class, and Irish laboring class. It did not seem advisable to include in this tentative investigation foreign countries, because the number of available classes is small and the differences between the statures of children in America and foreign countries are greater than in the groups here considered.

Following is the result of our calculation:

TABLE XXIII.—*Variabilities of social groups.*

Age.	Boys.		Girls.	
	Number of groups.	Variability.	Variability.	Number of groups.
		<i>Mm.</i>	<i>Mm.</i>	
6	9	11		
7	9	10	7	12
8	10	11	11	13
9	10	9	10	13
10	10	9	10	12
11	10	11	9	13
12	9	14	15	13
13	8	16	16	11
14	7	26	14	10
15	7	25	13	10
16	5	5	13	10

We think that, notwithstanding the small number of cases, this table shows that in boys the variabilities of social groups increase up to the fourteenth or fifteenth year, while in girls the increase, which lasts until the thirteenth year, is followed by a decrease. That is to say, the development here follows the general law of development of the individual. The groups which live under less favorable conditions develop slowly, but have a longer period of growth, without, however, being able to make up for the early losses by the longer period.

In the following tables we have collected the material on which our discussions are based. The publication of our observations in extenso seems justifiable, since the theory of growth requires further elaboration in many directions. For students of these subjects material will be indispensable, and a series of observations collected with considerable care and embodying many data will obviate the necessity of beginning every new study with the collection of new material.

The data were collected in Worcester, Mass., in the years 1891 and 1892. Most of the measurements were made in the public schools and high schools, and comparatively few only in private schools. The measurements were taken by F. Boas and by a number of students in the anthropological and psychological departments of Clark University. A preliminary discussion of the material was published by G. M. West.^a In the following tables the age is given in years and months. The column "child" indicates the order of birth. All measurements of length are given in millimeters; weights in pounds avoirdupois. Weight was taken with clothing, but without shoes. Stature was measured standing free, by means of a rod with sliding arm; height sitting was taken

^a Archiv für Anthropologn., 1893, p. 13 et seq.

on a level seat, whenever possible the knees above the level of the seat; length of head is the maximum length; breadth the maximum breadth; breadth of

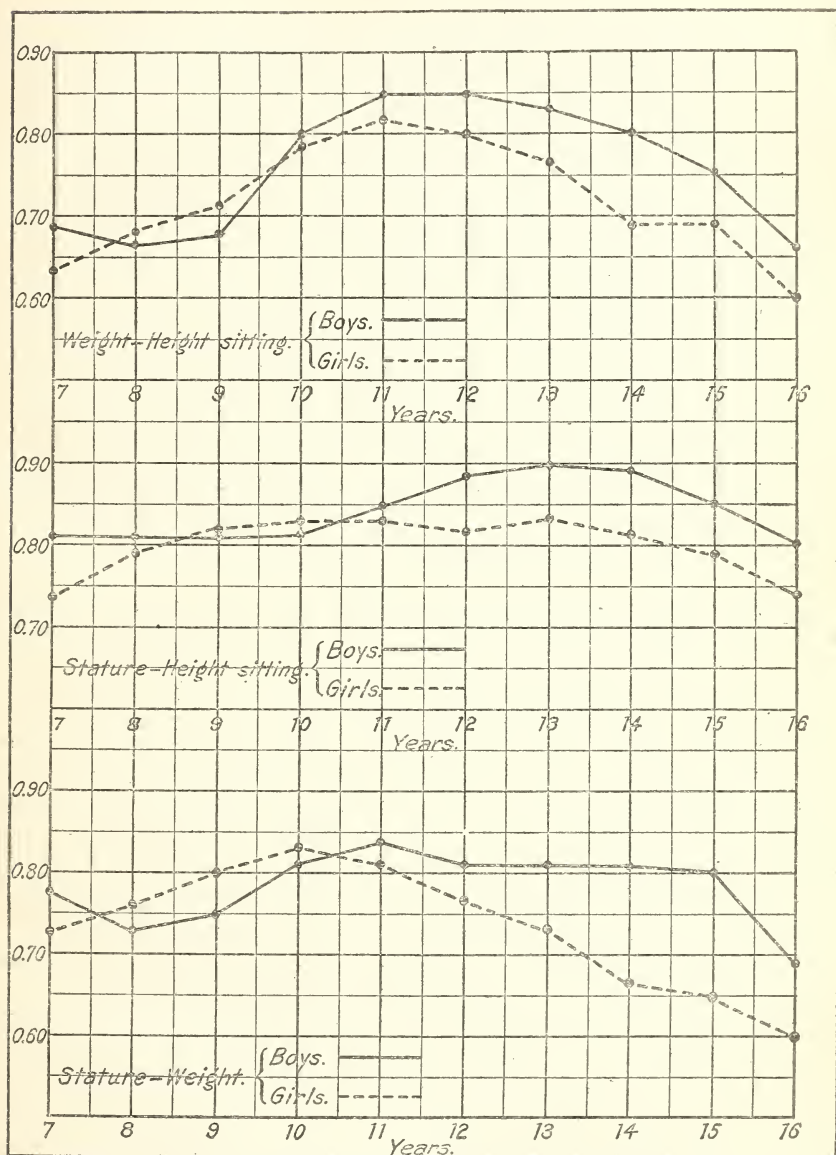


FIG. 1.—Correlations during the period of growth.

face the bizygomatic breadth. All of them were taken with pointed calipers. Height of face (1) and (2) are respectively the distances from naision and hairline to the chin. Length of forearm is the distance from the olecranon to

the tip of the middle finger. Breadth of hand is measured from first to fourth finger across the knuckles, the hand being held flat. Colors of hair are given

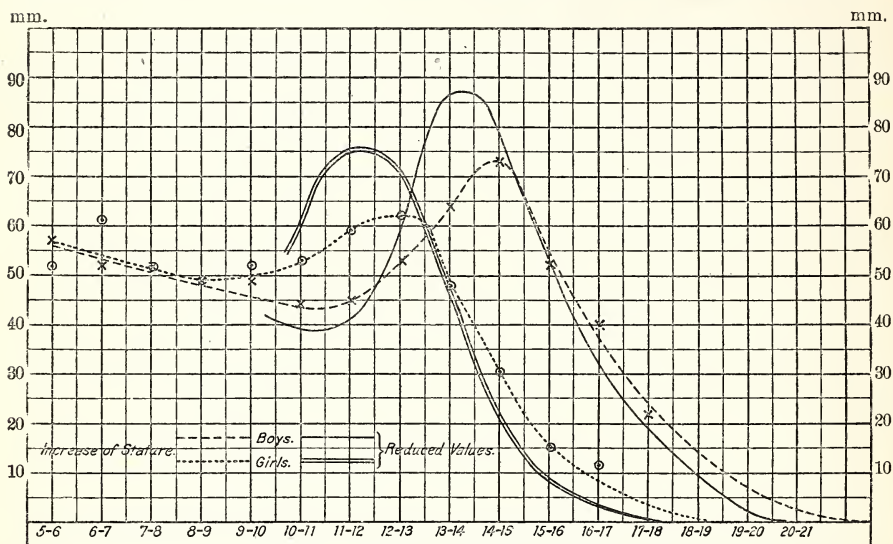


FIG. 2.—Typical increases of statures.

as black (bla.), dark brown (d. br.), brown (br.), light brown (l. br.), blonde (blo.), red. Colors of the eyes as dark brown (d. br.), brown (br.), light brown

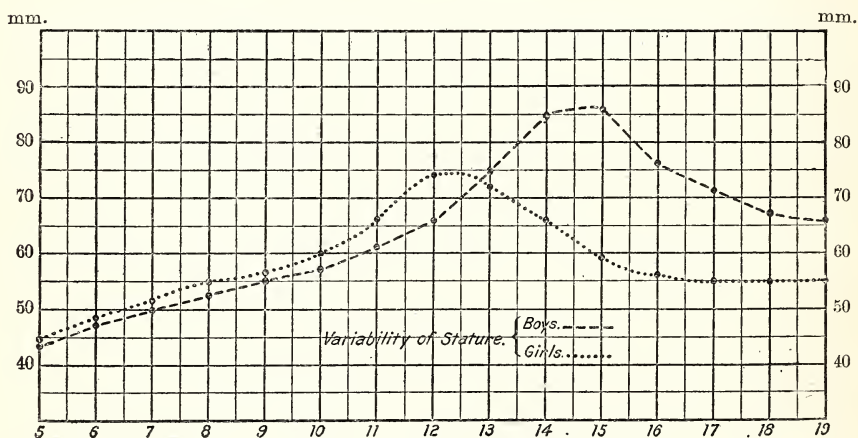


FIG. 3.—Variability of stature.

(l. br.), gray (gr.), gray blue (g. bl.), blue (bl.). The series of repeated measurements were taken after an interval of approximately one year.

5-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	5.8	1	3	1,073	612	175	136	108	42	blo.	bl.	1	1
2.	5.11	1	1	1,158	649	177	145	117	51	blo.	bl.		
3.	5.3	1	4	1,063	593	171	139	115	41	d. br.	d. br.	2	2
4.	5.9	2	2	1,203	650	175	138	115	52	d. br.	br.		1
5.	5.10	1	6	1,123	623	183	138	105	47	blo.	bl.	3	2
6.	5.10	1		1,141	622	179	144	113	43	blo.	l. br.		
7.	5.5	1	4	1,031	586	172	142	114	32	d. br.	l. br.	3	1
8.	5.9	1		1,065	595	162	141	113	38	blo.	bl.		
9.	5.8	1		1,150	627	188	147	117	43	l. br.	bl.		
10.	5.9	1		1,114	624	185	140	113	43	br.	bl.		
11.	5.11	1	2	1,155	648	176	149	117	48	r. br.	bl.	1	
12.	5.7	1	8	1,167	657	184	153	118	57	br.	bl.	4	4
13.	5.2	1	5	1,029	598	177	137	106	39	blo.	br.	2	3
14.	5.1	1	2	1,061	553	175	138	108	35	blo.	g. bl.	2	
15.	5.11	1	3	1,076	597	173	139	109	41	d. br.	bl.	1	1
16.	5.5	1	1	1,108	616	177	136	112	43	d. br.	bl.		
17.	5.2	1	4	1,084	601	173	149	116	42	br.	g. bl.	3	1
18.	5.4	1	4	1,108	614	171	138	113	40	l. br.	g. bl.	1	2
19.	5.8	1	3	1,051	574	173	137	108	38	br.	d. br.	1	3
20.	5.3	1	6	1,048	570	182	145	143	39	blo.	bl.	2	2
21.	5.6	1	1	1,062	596	173	143	115	41	br.	bl.		
22.	5.5			1,100	616	179	132	114	48	blo.	g. bl.	2	1
23.	5.10	1	5	1,182	590	183	144	113	39	d. br.	bl.	2	2
24.	5.10	1	6	1,089	604	176	135	106	45	blo.		2	4
25.	5.4	1	2	1,102	596	172	139	117	41	blo.	g. bl.	3	1
26.	5.11	1	3	1,075	581	169	136	119	44	br.	gr.	1	1
27.	5.8	1	1	1,089	563	182	139	118	46	d. blo.	gr.		1
28.	5.11	1	1	1,041	583	177	142	116	40	d. br.	d. br.	1	1
29.	5.10	1	6	1,091		174	134	117		l. br.	g. bl.	3	5
30.	5.4	1	3	1,187		174	148	115		l. br.	gr.	3	1
31.	5.6	1	2	1,056		174	138	112		d. blo.	g. bl.	1	1
32.	5.7	1	3	1,136		178	137	117		d. br.	bl.	1	2
33.	5.5	1	1	1,047		180	134	113		blo.	d. br.		
34.	5.2		1	1,082	610	184	150	120		d. br.	d. br.		
35.	5.5		2	1,082	605	177	137	111		l. blo.	d. br.		1
36.	5.7	1		1,084	600				45				
37.	5.11	1	3	1,097	638	184	140	116	42	br.	bl.		2
38.	5.11	1	1		609	179	139	110	46	bl.	gr.	1	

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
22.	1,090	94				30.		89	137	58	
23.	1,067	96				31.		88	134	52	
24.	1,075	93				32.		90	142	52	
25.	1,142	93				33.		97	131	60	
26.	1,079	95				34.	1,071		140	51	
27.	1,065	97				35.	1,101	87	141	56	
28.	1,014	89				36.				58	295
29.		90	137	57							

6-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	6.0	-----	4	1.158	644	178	141	120	50	br.	g. bl.	-----	3
2	6.4	-----	2	1.097	625	180	139	112	45	l. br.	d. br.	1	3
3	6.6	-----	3	1.158	618	174	147	116	49	r. br.	d. br.	1	1
4	6.4	1	2	1.136	605	169	146	120	45	br.	bl.	2	-----
5	6.4	-----	3	1.103	632	180	154	118	47	d. br.	l. br.	1	1
6	6.9	-----	2	1.189	661	196	149	118	50	blo.	g. bl.	-----	1
7	6.10	-----	3	1.145	633	182	136	110	46	l. br.	bl.	2	2
8	6.10	-----	3	1.190	649	170	137	111	41	blo.	l. br.	1	1
9	6.10	-----	1	1.180	671	179	148	117	56	blo.	bl.	1	2
10	6.4	-----	4	1.083	614	184	142	110	46	br.	l. br.	2	-----
11	6.6	-----	3	1.178	647	182	138	114	48	blo.	br.	1	1
12	6.8	-----	2	1.145	600	184	143	112	46	blo.	bl.	1	-----
13	6.8	1	1	1.052	563	175	133	106	35	blo.	bl.	1	1
14	6.10	1	4	1.271	664	177	147	119	56	d. blo.	bl.	1	2
15	6.3	1	1	1.147	645	188	143	118	50	blo.	bl.	1	-----
16	6.6	1	1	1.174	665	178	145	121	55	br.	bl.	-----	1
17	6.10	1	2	1.163	687	179	135	114	51	d. blo.	bl.	-----	1
18	6.4	1	3	1.138	621	187	149	122	49	blo.	bl.	4	1
19	6.10	1	1	1.132	639	183	133	107	42	br.	bl.	-----	1
20	6.3	2	1	1.158	660	200	143	119	53	br.	d. br.	1	-----
21	6.8	1	4	1.123	645	185	140	114	43	br.	bl.	-----	2
22	6.6	1	4	1.090	607	175	139	116	42	d. blo.	bl.	2	2
23	6.10	1	1	1.140	616	181	148	118	43	d. blo.	bl.	-----	-----
24	6.6	1	6	1.098	565	181	144	115	44	d. blo.	bl.	1	4
25	6.1	1	2	1.227	668	180	141	124	61	br.	g. bl.	1	-----
26	6.10	1	4	1.143	580	180	144	105	47	d. br.	br.	-----	4
27	6.4	1	4	1.220	642	182	140	110	52	br.	bl.	2	1
28	6.3	1	3	1.062	595	172	136	105	40	br.	bl.	2	2
29	6.1	1	1	1.173	631	181	133	107	44	br.	gr.	-----	-----
30	6.1	1	5	1.097	612	178	136	105	40	br.	d. br.	2	2
31	6.10	1	7	1.134	618	177	145	113	45	br.	gr.	3	3
32	6.8	1	3	1.046	581	170	132	105	34	br.	l. br.	1	1
33	6.9	1	4	1.117	627	165	143	118	48	br.	l. br.	3	1
34	6.6	1	1	1.070	585	185	142	113	43	br.	bl.	-----	-----
35	6.1	1	2	1.092	597	172	136	114	48	br.	br.	3	1
36	6.8	1	1	1.115	629	184	140	112	44	br.	bl.	-----	-----
37	6.10	1	1	1.153	595	179	138	110	47	blo.	bl.	1	1
38	6.6	1	2	1.105	625	175	135	111	41	d. br.	bl.	3	1
39	6.9	3	2	1.274	684	179	136	121	63	blo.	br.	1	-----
40	6.4	2	2	1.200	665	180	142	120	55	d. br.	br.	1	1
41	6.8	2	4	1.044	586	185	149	113	40	br.	bl.	4	-----
42	6.7	1	2	1.064	593	185	147	115	41	br.	br.	-----	1
43	6.7	1	-----	1.090	599	169	141	111	42	br.	br.	-----	-----
44	6.6	1	4	1.083	620	179	142	119	41	l. br.	l. br.	2	1
45	6.11	1	-----	1.093	607	171	133	106	39	-----	-----	-----	-----
46	6.9	1	-----	1.224	667	196	159	122	55	br.	bl.	-----	-----
47	6.8	1	-----	1.140	631	181	143	112	45	d. blo.	bl.	-----	-----
48	6.4	1	-----	1.138	601	184	137	119	45	blo.	bl.	-----	-----
49	6.11	1	-----	1.098	600	175	144	112	43	r. br.	d. br.	-----	-----
50	6.2	1	-----	1.077	582	175	141	117	42	br.	br.	-----	-----
51	6.9	2	2	1.092	605	176	137	118	41	br.	d. br.	1	-----
52	6.2	1	1	1.086	587	175	143	115	40	blo.	bl.	-----	-----
53	6.7	1	3	1.084	619	176	143	116	44	d. br.	br.	2	2
54	6.9	1	8	1.144	644	176	149	118	51	br.	br.	4	7
55	6.1	1	2	1.136	633	173	135	112	42	br.	bl.	-----	1
56	6.6	1	1	1.071	613	166	134	108	41	d. blo.	d. br.	-----	-----
57	6.6	1	3	1.165	646	184	136	114	48	br.	br.	1	1
58	6.0	1	3	1.190	658	181	143	115	50	l. br.	br.	2	1
59	6.0	1	3	1.085	593	176	137	111	43	br.	bl.	2	1
60	6.3	1	2	1.067	586	185	140	110	44	d. br.	d. br.	2	1
61	6.1	1	8	1.062	604	179	141	110	39	d. br.	d. br.	6	2
62	6.4	1	3	1.102	605	182	132	109	50	d. blo.	br.	2	1
63	6.7	1	6	1.045	591	176	135	111	36	br.	br.	4	3
64	6.4	1	3	1.066	597	165	139	108	38	d. br.	d. br.	1	1
65	6.9	2	2	1.249	671	178	142	118	56	d. blo.	g. bl.	1	-----
66	6.8	1	2	1.208	658	180	146	117	50	br.	br.	-----	1
67	6.6	1	1	1.119	576	173	141	115	46	d. br.	g. bl.	1	-----
68	6.9	1	1	1.172	634	191	141	115	49	br.	br.	-----	-----
69	6.10	1	1	1.135	590	167	132	112	42	r. br.	d. br.	1	-----
70	6.9	1	4	1.086	601	172	139	117	43	d. br.	d. br.	2	2
71	6.11	1	4	1.038	610	172	146	116	42	d. br.	d. br.	2	2
72	6.3	1	1	1.109	606	173	127	115	42	d. br.	bl.	-----	-----
73	6.3	1	1	1.178	664	183	146	119	58	blo.	bl.	-----	-----
74	6.10	1	2	1.229	661	180	141	119	52	l. br.	g. br.	-----	1
75	6.5	1	4	1.211	663	178	139	117	50	br.	gr.	-----	3
76	6.11	1	5	1.122	622	179	143	110	45	d. blo.	bl.	2	2
77	6.2	1	4	1.075	609	173	139	110	41	d. br.	bl.	-----	1
78	6.0	1	4	1.042	573	174	136	105	35	br.	bl.	2	1
79	6.4	1	3	1.220	673	189	145	122	53	br.	d. br.	0	2

6-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
80.	6.9	1	3	1,117	612	179	135	110	44	br.	g. bl.	2	1
81.	6.5	1	3	1,055	606	172	137	109	38	br.	g. br.	2	1
82.	6.6	1	1	1,247	685	178	139	119	52	r. br.	g. bl.	2	1
83.	6.5	1	3	1,142	640	183	146	117	49	d. br.	d. br.	2	1
84.	6.2	1	3	1,072	602	189	139	114	46	br.	gr.	2	1
85.	6.2	1	3	1,094	594	170	139	114	47	br.	br.	1	1
86.	6.0	1	3	1,010	562	171	139	116	39	br.	bl.	4	1
87.	6.10	1	3	1,205	671	183	140	114	57	br.	bl.	1	3
88.	6.8	1	1	1,042	565	179	139	115	43	d. br.	g. bl.	1	1
89.	6.9	1	1	1,125	612	176	140	111	48	l. br.	g. br.	1	1
90.	6.3	1	2	1,184	649	184	140	107	54	l. br.	br.	1	1
91.	6.11	1	6	1,088	581	167	141	111	47	l. br.	br.	4	1
92.	6.3	1	3	1,089	598	171	141	112	41	l. br.	gr.	1	3
93.	6.0	1	1	1,146	652	175	140	111	47	blo.	br.	1	2
94.	6.5	2	2	1,127	622	174	141	118	47	br.	g. bl.	2	2
95.	6.10	1	4	1,105	625	171	138	112	41	br.	bl.	2	1
96.	6.3	1	3	1,109	618	185	144	118	46	br.	bl.	1	1
97.	6.2	1	1	1,161	639	190	142	109	44	d. br.	gr.	1	1
98.	6.1	1	1	1,154	639	176	140	117	44	blo.	g. bl.	1	1
99.	6.9	1	6	1,116	611	180	141	120	48	d. br.	d. br.	3	2
100.	6.3	1	1	1,079	600	168	139	111	44	d. blo.	d. br.	1	1
101.	6.5	1	1	1,103	611	182	132	111	44	d. br.	gr.	1	1
102.	6.4	1	2	1,113	611	165	144	122	44	l. br.	l. br.	1	1
103.	6.8	1	10	1,112	611	169	148	116	44	d. br.	bl.	5	4
104.	6.10	1	5	1,075	600	176	142	111	44	bla.	bla.	4	1
105.	6.9	2	2	1,220	683	175	139	115	45	d. br.	gr.	2	1
106.	6.0	1	1	1,129	630	192	140	111	44	.....	.....	.....	.....
107.	6.0	1	1	1,192	640	192	140	111	45	.....	.....	.....	.....
108.	6.11	1	1	1,176	603	192	140	111	45	.....	.....	.....	.....
109.	6.7	1	1	1,132	605	192	140	111	44	.....	.....	1	.....
110.	6.0	1	1	1,144	615	192	140	111	44	.....	.....	.....	.....
111.	6.11	1	1	1,155	627	192	140	111	45	.....	.....	.....	.....
112.	6.4	1	1	1,017	561	183	139	110	37	bl.	d. br.	.....	1

REPEATED MEASUREMENTS.

Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1	6.8	.....	1,131	638	300	61	48	13	6.2	1	1,096	625	290	56	42
3	6.0	.....	1,124	614	312	63	44	14	6.1	1	1,133	605	295	59	40
9	6.9	1	1,185	615	330	58	46	17	6.1	1	1,143	630	310	62	55
10	6.9	1	1,222	675	320	59	47	18	6.4	1	1,172	640	320	61	45

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
84	1,064	90	.....	.....	.....	98	.....	91	.....	56	.....
85	1,112	94	.....	.....	.....	99	.....	102	.....	64	.....
86	1,025	86	.....	.....	.....	100	.....	136	.....	57	.....
87	1,206	102	.....	.....	.....	101	.....	89	.....	55	.....
88	1,063	93	.....	.....	.....	102	.....	90	.....	55	.....
89	1,144	90	.....	.....	.....	103	.....	94	.....	53	.....
90	1,203	95	.....	.....	.....	104	.....	98	.....	.....	.....
91	1,085	94	.....	.....	.....	105	1,224	91	144	58	.....
92	1,092	92	.....	.....	.....	106	.....	.....	.....	59	310
93	1,141	98	.....	.....	.....	107	.....	.....	.....	61	330
94	1,177	95	.....	.....	.....	108	.....	.....	.....	57	310
95	1,099	92	.....	.....	.....	109	.....	.....	.....	61	295
96	1,139	95	.....	.....	.....	110	.....	.....	.....	60	305
97	.....	102	160	.....	.....	111	.....	.....	.....	58	305

7-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	7.6		4	1.293	697	188	143	124	63	br.	bl.	4	2
2	7.4		1	1.140	623	175	140	112	48	blo.	bl.	1	
3	7.10		3	1.170	638	177	144	123	53	l. br.	bl.	4	1
4	7.9		1	1.209	644	185	141	117	53	br.	bl.		1
5	7.9	2	1	1.286	697	179	150	123	61	br.	gr.		
6	7.3		1	1.155	641	180	146	116	45	blo.	g. bl.	1	
7	7.11		1	1.226	663	180	141	116	53	d. br.	d. br.		1
8	7.9		2	1.230	682	183	144	119	52	br.	gr.	1	
9	7.9		1	1.174	629	180	145	119	51	blo.	br.	1	
10	7.10	2	1	1.207	675	189	149	119	57	br.	gr.		
11	7.4		4	1.224	664	182	148	122	56	br.	l. br.	1	2
12	7.3		12	1.186	663	172	135	113	47	blo.	bl.	4	2
13	7.1		7	1.064	611	185	141	111	45	blo.	bl.	4	2
14	7.6		2	1.131	631	161	141	118	49	br.	gr.	2	1
15	7.6		2	1.141	661	168	144	119	48	blo.	bl.	1	1
16	7.0		1	1.136	620	180	137	112	49	blo.	gr.		2
17	7.0	2	5	1.180	660	182	139	116	51	r. br.	bl.	5	1
18	7.6	2	2	1.206	661	181	140	115	52	d. br.	bl.	1	
19	7.7		3	1.147	619	172	144	113	45	br.	gr.	2	
20	7.0	2	1	1.119	640	188	145	114	49	br.	d. br.	1	1
21	7.4		5	1.105	611	175	134	110	44	blo.	d. br.	2	2
22	7.2		4	1.161	635	182	142	114	47	blo.	bl.	2	1
23	7.10	2	1	1.144	618	168	132	108	42	br.	bl.	1	
24	7.1	2	6	1.063	581	175	146	112	42	br.	br.	4	2
25	7.5	2	5	1.199	683	177	141	114	55	r. br.	d. br.	2	3
26	7.6	1	1	1.171	641	178	142	113	49	br.	d. br.	1	1
27	7.6		3	1.092	624	174	142	113	47	blo.	g. bl.	1	1
28	7.10	1	1	1.209	680	187	147	119	53	blo.	bl.		1
29	7.3	1	3	1.164	638	175	137	114	46	br.	d. br.	2	
30	7.9	1	1	1.151	640	179	144	121	50	d. blo.	gr.	1	1
31	7.0	1	2	1.134	597	174	140	114	42	br.	d. br.	1	
32	7.6	1	5	1.240	715	195	152	129	55	br.	br.	2	2
33	7.3		3	1.118	633	180	145	112	44	d. blo.	bl.	1	2
34	7.0	1	4	1.174	646	185	141	119	53	br.	bl.	1	1
35	7.9		5	1.168	633	183	147	115	46	blo.	gr.	1	3
36	7.6	1	1	1.201	680	185	139	112	54	blo.	gr.	1	1
37	7.8	1	3	1.128	628	176	132	114	42	d. blo.	bl.	2	
38	7.1	1	1	1.217	640	189	143	116	53	d. blo.	gr.		
39	7.9	3	3	1.112	594	185	136	106	45	blo.	g. bl.	1	1
40	7.10	3	3	1.228	684	184	140	109	51	r.	br.	1	5
41	7.1	3	1	1.253	660	189	145	118	52	blo.	bl.		
42	7.6	2	5	1.128	595	170	144	113	42	br.	l. br.	2	3
43	7.2	2	1	1.118	612	174	145	117	48	r. br.	br.	2	
44	7.6	2	3	1.221	630	185	146	118	53	br.	bl.		3
45	7.3	1	3	1.161	612	175	140	114	50	d. br.	br.	1	2
46	7.2	1	2	1.118	628	175	140	114	42	br.	br.	3	
47	7.1	1	1	1.095	567	179	139	110	40	br.	bl.	1	
48	7.2	1	2	1.153	602	178	153	115	47	blo.	bl.		
49	7.8	1	4	1.174	630	178	137	106	50	blo.	bl.	2	1
50	7.11	1	1	1.172	647	182	138	109	49	br.	d. br.	1	2
51	7.1			1.160	634	169	141	113	47	br.	gr.	1	
52	7.10	1	1	1.180	660	186	138	108	52	d. blo.	bl.	1	
53	7.5	1	1	1.096	602	175	144	113	39	d. blo.	bl.	1	
54	7.1	2	9	1.221	670	180	148	119	55	br.	bl.	3	6
55	7.11	2	2	1.157	652	175	141	114	48	br.	br.	3	3
56	7.7	2	4	1.185	660	178	143	109	44	br.	d. br.	2	
57	7.6	2	2	1.177	662	171	142	113	49	br.	gr.		1
58	7.10	2	2	1.178	661	181	156	121	44	blo.	br.		1
59	7.7	2	2	1.150	653	180	147	113	48	d. blo.	gr.		1
60	7.5	2	2	1.139	624	175	142	113	39	br.	gr.	3	1
61	7.0	1		1.137	616	163	127	99	49	br.	br.		
62	7.1	1	6	1.105	607	175	142	109	43	br.	br.	2	3
63	7.4	1	1	1.192	652	175	141	109	49	br.	bl.	2	2
64	7.5	3	1	1.259	695	181	146	117	64	d. br.	g. bl.	1	2
65	7.9	2	3	1.190	643	174	139	106	47	br.	bl.	2	1
66	7.10	2	1	1.174	667	176	143	116	55	br.	bl.		1
67	7.7	2	2	1.141	618	182	136	114	50	br.	bl.	1	
68	7.7	2	1	1.247	694	184	147	117	56	br.	bl.	1	
69	7.10	2	5	1.221	677	174	144	121	59	br.	br.	1	7
70	7.9	1		1.213	644	176	151	122	53	br.	bl.	1	2
71	7.3	1		1.144	615	176	143	113	43	br.	bl.		
72	7.3	1		1.154	655	191	142	121	50	bla.	br.		
73	7.4	1		1.125	608	178	147	115	43	br.	br.		
74	7.2	1		1.124	647	178	145	117	43	d. blo.	br.		
75	7.4	1		1.186	617	184	138	113	41	br.	br.		
76	7.7	3	1	1.205	667	188	137	114	57	d. br.	bl.		
77	7.8	2	1	1.167	646	171	146	117	47	blo.	br.		1
78	7.3	2	6	1.171	635	187	146	119	50	d. br.	d. br.	4	1
79	7.7	2	1	1.090	622	166	139	107	39	d. br.	d. br.		3
80	7.6	1	2	1.215	673	180	146	114	49	d. br.	d. br.	2	1

7-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
81	7.3	1	1	1,229	691	179	142	119	53	d. br.	d. br.	...	...
82	7.0	3	2	1,197	614	179	140	113	48	br.	g. bl.	1	2
83	7.1	2	2	1,182	657	184	142	118	59	br.	bl.	2	1
84	7.1	2	3	1,262	687	174	144	122	58	blo.	bl.	...	2
85	7.6	2	2	1,114	627	169	133	108	40	br.	bl.	...	2
86	7.3	2	2	1,147	688	177	140	116	53	br.	bl.	1	1
87	7.2	2	1	1,246	654	180	138	118	48	br.	bl.	...	...
88	7.8	1	1	1,133	622	180	141	113	46	blo.	bl.	...	1
89	7.4	1	2	1,145	632	176	136	113	51	br.	bl.	...	1
90	7.4	1	1	1,111	630	174	140	116	41	d. br.	d. br.	...	...
91	7.11	1	1	1,148	587	177	137	111	36	d. br.	d. br.	...	...
92	7.11	1	5	1,175	650	180	145	117	49	br.	bl.	1	...
93	7.4	2	2	1,198	667	184	132	107	53	br.	d. br.	...	4
94	7.7	1	2	1,180	612	183	141	109	46	br.	br.	2	1
95	7.11	1	2	1,129	613	172	132	110	45	d. br.	d. br.	...	2
96	7.3	1	4	1,231	654	178	148	122	55	blo.	br.	1	2
97	7.2	2	2	1,203	639	184	140	109	53	br.	br.	...	...
98	7.11	3	5	1,224	663	179	148	114	59	blo.	br.	3	3
99	7.9	2	4	1,189	640	184	148	117	47	blo.	gr.	...	3
100	7.5	2	4	1,213	649	184	138	117	56	blo.	g. bl.	3	1
101	7.10	2	1	1,292	674	180	150	118	58	blo.	g. bl.	1	2
102	7.11	2	4	1,214	630	178	147	117	45	blo.	gr.	3	...
103	7.4	2	2	1,243	642	185	146	118	53	br.	g. bl.	1	1
104	7.4	3	3	1,197	632	183	142	115	57	d. br.	d. br.	2	1
105	7.0	2	1	1,219	647	179	149	120	49	br.	bl.	...	...
106	7.6	2	1	1,265	707	182	142	116	61	r. br.	bl.	1	...
107	7.4	2	8	1,179	661	188	144	115	48	br.	l. br.	3	5
108	7.5	1	1	1,227	663	191	147	120	64	br.	g. bl.	...	1
109	7.6	1	1	1,188	647	189	139	113	50	d. br.	d. br.	...	...
110	7.4	1	2	1,194	614	182	142	115	53	blo.	d. br.	1	2
111	7.7	1	1	1,150	655	188	146	118	52	br.	bl.	1	1
112	7.4	1	2	1,113	616	184	135	109	45	bla.	d. br.	2	...
113	7.0	1	1	1,097	607	176	137	117	44	blo.	bl.	...	1
114	7.2	1	1	1,137	624	189	136	110	47	br.	br.	1	...
115	7.1	1	2	1,149	650	185	146	113	50	br.	bl.	2	2
116	7.9	1	4	1,156	627	177	147	118	54	br.	gr.	2	1
117	7.3	1	1	1,140	605	177	141	118	42	blo.	bl.	3	1
118	7.3	1	2	1,136	640	183	131	109	46	br.	g. bl.	3	...
119	7.4	1	3	1,179	675	171	148	121	53	br.	br.	...	2
120	7.7	1	1	1,108	630	182	139	117	48	blo.	bl.	1	...
121	7.4	1	2	1,146	633	176	137	109	47	blo.	bl.	4	1
122	7.9	1	5	1,170	650	178	147	119	54	d. br.	d. br.	3	2
123	7.8	1	4	1,172	646	174	139	112	50	br.	g. bl.	2	2
124	7.6	4	5	1,182	650	189	139	109	52	d. br.	gr.	3	2
125	7.10	2	2	1,186	660	171	145	110	52	d. br.	bl.	...	2
126	7.5	2	1	1,266	610	174	139	117	59	...	...	...	1
127	7.6	2	3	1,219	660	187	145	114	57	d. br.	gr.	1	1
128	7.10	2	1	1,233	670	177	138	113	60	d. br.	bl.	1	...
129	7.6	2	3	1,319	720	196	136	119	62	d. blo.	gr.	1	1
130	7.7	2	1	1,150	610	181	131	115	50	d. blo.	g. bl.	...	...
131	7.5	2	2	1,144	630	174	141	118	50	d. blo.	bl.	...	3
132	7.9	1	7	1,136	610	185	137	119	48	d. br.	bl.	4	1
133	7.7	1	5	1,107	620	167	136	109	49	d. br.	d. br.	...	4
134	7.2	1	1	1,233	670	178	148	121	57	d. br.	l. br.	...	1
135	7.8	1	1	1,221	670	188	140	115	53	l. br.	gr.	...	1
136	7.5	1	9	1,189	660	171	140	117	50	d. br.	d. br.	5	5
137	7.2	1	2	1,135	600	171	149	116	45	d. br.	bl.	3	1
138	7.9	1	2	1,172	650	171	140	110	52	d. br.	bl.	2	2
139	7.0	1	2	1,119	600	176	139	118	50	d. blo.	bl.	2	...
140	7.1	2	1	1,195	620	190	141	116	55	d. blo.	gr.	...	...
141	7.6	2	1	1,218	700	184	145	120	60	l. br.	d. br.	1	...
142	7.10	1	2	1,192	610	179	135	113	55	l. br.	gr.	1	...
143	7.0	1	6	1,202	660	198	144	124	60	bia.	d. br.	2	4
144	7.9	...	1	1,250	693	192	139	114	60	d. br.	gr.	2	1
145	7.11	4	1	1,250	665	175	146	121	...	l. br.	d. br.	...	...
146	7.11	2	...	1,111	580	...	...	...	38	...	...	...	...
147	7.0	1	...	1,097	595	...	...	...	39	...	...	...	...
148	7.5	2	...	1,166	645	...	...	...	47	...	...	...	...
149	7.4	2	...	1,239	685	...	...	...	60	...	...	...	...
150	7.6	1	...	1,172	640	...	...	...	44	...	...	...	...
151	7.5	1	...	1,147	635	...	...	...	43	...	...	...	...
152	7.8	1	...	1,184	680	...	...	...	48	...	...	...	...
153	7.9	2	...	1,267	630	...	...	...	59	...	...	...	...
154	7.5	2	...	1,240	660	...	...	...	56	...	...	...	...
155	7.7	...	...	1,187	650	...	...	...	52	...	...	...	...
156	7.4	...	...	1,191	610	...	...	...	...	...	...	...	...
157	7.6	2	...	1,156	625	...	...	...	46	...	...	...	...
158	7.5	2	...	1,277	695	...	...	...	62	...	...	...	...
159	7.5	2	...	1,154	640	...	...	...	51	...	...	...	...
160	7.1	2	...	1,251	680	...	...	...	58	...	...	...	...
161	7.11	2	...	1,230	637	...	...	...	59	...	...	...	...

8-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	8.10	4	3	1,201	653	187	142	115	51	br.	bl.	1	2
2	8.11			1,270	653	186	147	119	56	blo.	bl.	1	2
3	8.2		1	1,197	627	174	151	118	48	br.	bl.		
4	8.11		1	1,270	694	185	148	121	62	br.	bl.		
5	8.0		1	1,280	673	188	145	115	59	blo.	bl.	1	
6	8.3		1	1,186	665	176	142	119	48	l. br.	l. br.		
7	8.9	3	2	1,276	660	180	149	120	58	br.	bl.		2
8	8.4		1	1,188	657	177	142	113	49	br.	d. br.	1	
9	8.10		6	1,206	651	180	143	107	47	r.	d. br.		5
10	8.6		2	1,262	694	180	140	116	55	l. br.	bl.	3	1
11	8.10		3	1,276	698	189	136	117	63	l. br.	bl.	2	2
12	8.6	3	1	1,243	665	187	141	112	49	d. br.	g. bl.		
13	8.6	3	1	1,271	700	183	147	116	55	l. br.	bl.		
14	8.4		2	1,308	714	186	142	115	63	blo.	bl.		1
15	8.9		1	1,171	645	185	143	123	53	blo.	bl.		
16	8.6		1	1,334	734	182	141	121	69	br.	bl.		
17	8.0		3	1,290	710	187	137	118	62	d. br.	d. br.		3
18	8.0		3	1,224	651	184	146	116	51	blo.	bl.		2
19	8.3		1	1,216	682	180	143	119	62	d. blo.	d. br.		1
20	8.9		5	1,221	692	186	151	112	58	blo.	bl.	1	4
21	8.9	2	2	1,209	663	177	137	129	47	blo.	bl.	2	
22	8.10		1	1,210	651	179	139	111	48	d. br.	d. br.	1	
23	8.11		2	1,190	658	179	145	110	52	d. blo.	gr.	2	2
24	8.7		4	1,202	634	179	142	113	54	br.	gr.		4
25	8.11		2	1,267	677	178	135	112	52	br.	br.		
26	8.0		1	1,197	662	179	137	118	51	br.	br.	1	
27	8.0		5	1,190	650	172	144	111	47	l. br.	bl.	6	1
28	8.11	2	2	1,169	642	179	139	113	46	l. br.	l. br.	1	
29	8.9	2	3	1,296	687	179	140	117	65	blo.	bl.	6	2
30	8.5		3	1,203	642	184	142	112	49	br.	d. br.	1	1
31	8.6		1	1,109	614	170	142	112	46	br.	d. bl.	1	3
32	8.11		3	1,305	712	178	149	118	61	bla.	l. br.	3	2
33	8.5	4	3	1,240	660	181	139	113	50	br.	gr.	2	1
34	8.7	3	3	1,228	663	186	140	108	53	d. blo.	gr.	1	1
35	8.11	3	3	1,252	676	184	141	112	57	blo.	g. bl.	3	3
36	8.5	3	3	1,229	717	185	153	121	61	blo.	bl.	2	2
37	8.8	3	4	1,168	623	185	150	116	52	br.	g. bl.	1	3
38	8.8	3	5	1,252	704	179	139	119	62	d. br.	l. br.	6	1
39	8.9	3	2	1,250	663	183	140	115	54	blo.	bl.	1	
40	8.5		2	1,276	704	181	148	121	70	d. br.	g. bl.		2
41	8.1		4	1,212	637	181	141	114	53	d. blo.	g. bl.	3	
42	8.6		1	1,289	660	185	141	118	81	d. br.	br.		
43	8.10		3	1,157	635	176	140	114	49	d. blo.	g. bl.	1	3
44	8.11		1	1,190	643	169	141	116	48	d. blo.	g. bl.	1	1
45	8.3		5	1,144	631	181	147	110	47	d. blo.	g. bl.	4	2
46	8.10		2	1,265	686	185	140	116	54	blo.	l. br.	4	
47	8.1	1	4	1,170	614	176	143	110	48	br.	br.		3
48	8.11	3	6	1,189	645	175	136	114	57	br.	gr.	4	2
49	8.10		3	1,274	695	184	148	115	57	br.	br.	2	2
50	8.9		4	1,283	683	182	139	121	61	bla.	gr.	3	
51	8.10		2	1,265	699	191	149	128	64	br.	g. br.		1
52	8.8		1	1,234	684	184	145	121	57	d. br.	br.	2	2
53	8.6	4	4	1,210	676	186	142	121	55	br.	bl.	1	3
54	8.8	3	1	1,247	692	171	146	119	52	blo.	br.		1
55	8.4		1	1,215	670	183	138	111	50	blo.	bl.	1	1
56	8.11	3	5	1,214	679	185	143	115	58	blo.	bl.	5	2
57	8.5		1	1,205	629	184	144	117	47	blo.	bl.	1	
58	8.3	1	3	1,261	683	180	151	122	60	d. br.	bl.		1
59	8.6		2	1,111	619	184	143	109	45	l. br.	bl.	2	1
60	8.1		1	1,200	602	183	147	118	50	br.	bl.	1	
61	8.3		1	1,237	672	181	143	113	51	blo.	bl.		
62	8.6		1	1,217	649	178	153	119	50	br.	bl.	1	2
63	8.5		2	1,250	678	174	145	122	57	blo.	bl.		1
64	8.1		2	1,260	684	180	148	117	66	br.	gr.		4
65	8.2		2	1,177	633	176	147	114	48	d. br.	bl.		1
66	8.7		2	1,280	688	178	139	114	59	br.	gr.		2
67	8.0		2	1,196	621	179	152	122	50	br.	br.	4	1
68	8.5		2	1,228	647	189	150	118	57	d. br.	bl.	1	2
69	8.7		1	1,285	725	192	147	123	73	blo.	bl.		1
70	8.6		1	1,291	702	186	146	119	60	d. br.	g. bl.	4	4
71	8.7		1	1,275	710	180	142	117	62	br.	d. br.		1
72	8.1		5	1,186	643	173	142	115	50	d. br.	d. br.	2	2
73	8.0		1	1,182	612	165	134	112	41	d. br.	g. br.	3	1
74	8.4			1,225	685	173	147	117	51	d. blo.	bl.	5	6
75	8.5			1,308	713	183	145	115	63	d. br.	bl.	1	
76	8.5			1,156	604	180	149	119	50	d. br.	d. br.	3	
77	8.10	4	2	1,235	673	173	142	114	53	d. br.	gr.	3	1

8-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
78.....	8.0	3	3	1,232	663	189	152	127	54	d. br.	bl.	1	2
79.....	8.5	2	3	1,227	673	177	143	114	50	l. br.	bl.	---	1
80.....	8.8	2	1	1,264	687	177	148	109	50	blo.	br.	---	2
81.....	8.9	2	5	1,186	621	174	140	115	49	d. br.	br.	4	3
82.....	8.7	2	2	1,283	676	185	144	122	59	r. br.	bl.	1	---
83.....	8.0	2	9	1,185	668	183	137	112	48	blo.	br.	5	3
84.....	8.11	3	4	1,275	700	184	148	117	53	d. br.	gr.	2	1
85.....	8.9	3	1	1,142	652	179	148	119	47	br.	bl.	---	1
86.....	8.6	3	1	1,240	676	184	147	115	57	l. br.	bl.	1	---
87.....	8.10	2	2	1,184	660	177	145	116	50	br.	bl.	---	1
88.....	8.0	1	1	1,216	653	159	130	108	49	l. br.	g. bl.	---	---
89.....	8.4	2	4	1,210	660	172	146	120	56	br.	gr.	1	3
90.....	8.9	1	1	1,186	636	180	140	119	46	br.	br.	---	---
91.....	8.2	3	3	1,165	636	176	144	117	53	br.	br.	3	1
92.....	8.6	3	3	1,200	668	182	142	119	53	blo.	g. bl.	---	2
93.....	8.2	1	2	1,138	629	175	147	121	53	d. br.	d. br.	2	1
94.....	8.5	4	3	1,388	734	186	150	127	68	br.	bl.	1	1
95.....	8.6	3	4	1,229	659	174	142	116	51	blo.	bl.	1	2
96.....	8.10	3	6	1,232	633	174	142	115	53	r.	br.	2	1
97.....	8.10	3	3	1,225	659	185	139	111	53	blo.	gr.	---	1
98.....	8.1	3	2	1,293	683	177	149	116	63	br.	br.	1	3
99.....	8.7	3	4	1,259	648	186	143	119	56	l. br.	br.	---	---
100.....	8.8	3	3	1,232	672	180	147	119	56	l. br.	gr.	---	2
101.....	8.4	3	3	1,210	682	187	139	117	65	br.	gr.	2	---
102.....	8.1	2	1	1,232	649	180	151	116	56	br.	br.	---	---
103.....	8.7	2	1	1,283	696	180	140	116	54	br.	bl.	1	1
104.....	8.1	2	2	1,272	673	181	144	117	57	blo.	br.	1	1
105.....	8.0	2	1	1,330	710	185	133	111	57	blo.	bl.	1	1
106.....	8.0	2	4	1,314	716	191	140	121	60	blo.	gr.	2	2
107.....	8.4	2	2	1,149	627	176	135	109	44	br.	bl.	1	---
108.....	8.2	2	3	1,190	663	169	149	119	50	br.	br.	3	2
109.....	8.7	1	7	1,171	642	174	137	111	56	d. br.	gr.	2	4
110.....	8.5	1	4	1,204	631	175	136	114	49	d. br.	d. br.	2	1
111.....	8.4	1	1	1,113	621	176	140	113	46	br.	bl.	1	---
112.....	8.2	4	5	1,293	---	181	145	124	---	d. br.	d. br.	2	4
113.....	8.1	3	6	1,190	---	184	142	118	---	blo.	gr.	2	3
114.....	8.6	2	2	1,267	---	172	142	118	---	blo.	gr.	1	3
115.....	8.6	1	4	1,178	---	179	142	123	---	d. br.	bl.	1	3
116.....	8.1	1	2	1,135	---	172	150	120	---	l. br.	bl.	---	1
117.....	8.4	2	2	1,229	---	178	142	115	---	d. br.	gr.	---	1
118.....	8.6	2	1	1,198	---	181	150	122	---	d. br.	gr.	3	1
119.....	8.10	4	2	1,305	---	174	140	118	---	l. br.	d. br.	1	1
120.....	8.4	3	1	1,206	---	181	137	111	---	d. blo.	gr.	2	1
121.....	8.11	3	1	1,321	---	188	140	116	---	d. br.	l. br.	3	1
122.....	8.1	1	---	1,224	675	---	---	---	52	---	---	---	---
123.....	8.5	2	---	1,200	667	---	---	---	52	---	---	---	---
124.....	8.1	2	---	1,269	675	---	---	---	59	---	---	---	---
125.....	8.11	2	---	1,073	620	---	---	---	47	---	---	---	---
126.....	8.5	3	---	1,331	693	---	---	---	63	---	---	---	---
127.....	8.7	---	---	1,255	680	---	---	---	56	---	---	---	---
128.....	8.0	1	---	1,176	640	---	---	---	49	---	---	---	---
129.....	8.3	3	---	1,261	690	---	---	---	60	---	---	---	---
130.....	8.11	4	---	---	660	---	---	---	76	---	---	---	---
131.....	8.6	3	---	1,237	670	---	---	---	53	---	---	---	---
132.....	8.3	3	---	1,328	625	---	---	---	35	---	---	---	---
133.....	8.1	2	---	1,197	650	---	---	---	55	---	---	---	---
134.....	8.10	2	---	1,243	655	---	---	---	50	---	---	---	---
135.....	8.10	2	---	1,242	680	---	---	---	53	---	---	---	---
136.....	8.1	1	---	1,210	658	---	---	---	56	---	---	---	---
137.....	8.0	2	---	1,205	660	---	---	---	53	---	---	---	---

8-year-old boys. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
2	8.5	2	1,203	664	332	67	52	46	8.3	2	1,167	645	300	60	47
3	8.10	4	1,221	662	341	65	55	48	8.3	2	1,200	620	335	63	51
5	8.9	4	1,348	716	362	69	69	52	8.11	2	1,241	680	340	61	57
6	8.9	4	1,282	698	346	63	60	54	8.1	2	1,373	700	340	65	60
9	8.10	2	1,235	665	320	57	57	56	8.8	2	1,232	680	340	61	50
10	8.10	2	1,262	685	330	59	60	57	8.5	2	1,243	670	325	57	56
11	8.4	2	1,280	673	340	64	63	58	8.11	2	1,229	680	340	64	51
12	8.2	2	1,244	680	341	63	56	59	8.8	2	1,185	670	310	61	51
13	8.0	2	1,133	645	310	60	50	60	8.6	2	1,188	650	325	61	46
14	8.1	2	1,180	670	324	66	54	62	8.2	2	1,137	645	310	60	48
17	8.0	2	1,237	670	345	62	57	63	8.3	2	1,253	695	325	62	55
18	8.7	2	1,252	674	344	64	55	65	8.9	3	1,256	670	330	62	49
19	8.8	2	1,188	640	336	63	50	66	8.10	3	1,225	685	320	63	57
20	8.0	2	1,253	646	337	60	55	67	8.7	3	1,219	640	330	64	55
21	8.5	2	1,163	635	315	60	49	71	8.4	1	1,201	640	325	64	48
22	8.3	2	1,216	654	327	63	53	73	8.5	2	1,174	610	325	62	47
23	8.9	2	1,184	630	310	60	45	74	8.3	2	1,176	650	325	60	47
24	8.1	2	1,110	595	305	62	45	75	8.4	2	1,242	640	335	58	48
25	8.4	2	1,243	688	330	63	60	76	8.4	4	1,264	680	340	68	70
26	8.5	2	1,212	652	325	60	54	77	8.8	3	1,211	670	340	65	51
28	8.10	2	1,254	693	326	64	60	78	8.4	3	1,223	660	325	65	57
29	8.3	2	1,230	670	335	57	51	79	8.7	3	1,145	640	310	63	43
31	8.0	2	1,192	647	315	62	46	81	8.11	2	1,287	720	335	67	58
32	8.7	2	1,300	725	350	66	60	83	8.0	2	1,242	670	330	62	62
33	8.2	2	1,165	648	308	63	48	84	8.0	2	1,315	710	360	63	62
37	8.8	2	1,166	620	310	64	44	85	8.6	3	1,173	655	325	58	54
39	8.10	2	1,166	620	320	58	48	86	8.4	2	1,207	695	320	63	58
40	8.11	4	1,282	710	470	64	56	88	8.9	2	1,175	625	315	50	51
42	8.4	2	1,176	635	320	61	50	89	8.6	2	1,194	640	340	65	54
43	8.3	2	1,177	660	320	60	51	92 a	8.0	2	1,250	660	345	59	54
44	8.7	2	1,281	675	350	63	57	94	8.7	1	1,231	645	320	62	51
45	8.4	2	1,222	670	355	66	56								

" See 92, 7 year series, age 7.11.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
109	1,180	95	—	—	—	124	—	—	—	64	335
110	1,180	99	—	—	—	125	—	—	—	57	290
111	1,085	92	—	—	—	126	—	—	—	70	365
112	—	98	148	—	—	127	—	—	—	67	340
113	—	103	153	—	—	128	—	—	—	62	320
114	—	100	160	—	—	129	—	—	—	60	330
115	—	100	157	59	—	130	—	—	—	60	340
116	—	97	144	53	—	131	—	—	—	58	325
117	—	97	148	62	—	132	—	—	—	56	320
118	—	96	147	59	—	133	—	—	—	64	335
119	—	102	159	63	—	134	—	—	—	64	340
120	—	96	156	61	340	135	—	—	—	65	335
121	—	98	161	61	360	136	—	—	—	61	324
122	—	—	—	61	330	137	—	—	—	59	320
123	—	—	—	63	323	—	—	—	—	—	—

9-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	9.7	---	3	1,358	715	182	139	122	56	blo.	bl.	1	2
2.	9.11	5	2	1,247	764	180	145	117	56	br.	g. bl.	1	1
3.	9.6	5	3	1,271	697	181	141	118	59	br.	bl.	1	2
4.	9.11	5	3	1,374	738	183	150	124	70	blo.	bl.	1	2
5.	9.2	---	2	1,288	692	184	155	121	66	l. br.	bl.	1	2
6.	9.6	5	3	1,392	747	174	152	127	68	br.	g. bl.	---	2
7.	9.9	4	1	1,238	679	177	142	121	59	br.	bl.	---	---
8.	9.7	4	5	1,242	691	178	149	121	62	d. br.	br.	1	3
9.	9.7	---	3	1,387	736	183	149	124	101	br.	br.	1	2
10.	9.11	4	2	1,273	676	176	146	119	66	blo.	gr.	---	1
11.	9.11	---	2	1,252	673	194	150	122	59	br.	g. bl.	1	2
12.	9.0	---	2	1,410	745	189	148	123	70	d. br.	l. br.	3	1
13.	9.1	---	3	1,341	733	191	148	122	68	br.	bl.	3	1
14.	9.3	4	2	1,279	664	176	139	114	53	l. br.	l. br.	1	---
15.	9.4	4	3	1,278	686	181	148	126	62	br.	gr.	---	1
16.	9.2	---	2	1,270	677	190	141	119	56	d. br.	bl.	4	1
17.	9.1	4	1	1,273	682	180	146	116	60	br.	gr.	---	1
18.	9.9	4	3	1,276	688	182	136	117	62	blo.	gr.	1	1
19.	9.7	4	1	1,312	708	188	146	127	69	br.	bl.	2	---
20.	9.8	3	1	1,229	665	183	143	113	51	l. br.	gr.	2	2
21.	9.5	---	1	1,367	720	180	141	112	73	l. br.	gr.	---	---
22.	9.3	3	1	1,187	649	175	141	117	54	blo.	bl.	2	---
23.	9.0	---	4	1,322	711	182	145	117	70	l. br.	bl.	---	---
24.	9.5	3	1	1,232	669	170	136	120	53	blo.	g. bl.	2	1
25.	9.2	3	3	1,263	685	175	147	119	59	br.	bl.	3	3
26.	9.8	3	4	1,381	725	186	150	125	74	d. br.	d. br.	1	3
27.	9.3	3	4	1,227	643	172	144	115	51	br.	l. br.	---	3
28.	9.1	3	5	1,350	718	166	145	125	65	blo.	bl.	2	2
29.	9.5	---	1	1,211	640	168	139	114	49	d. br.	bl.	---	---
30.	9.4	3	3	1,324	686	179	143	121	63	d. br.	br.	1	1
31.	9.10	---	1	1,227	671	175	144	118	57	br.	g. bl.	---	---
32.	9.6	---	1	1,262	694	190	142	116	58	r.	bl.	4	2
33.	9.6	---	1	1,250	687	176	155	123	60	d. br.	d. br.	2	1
34.	9.3	---	1	1,200	667	177	143	115	52	d. br.	gr.	1	---
35.	9.4	---	1	1,369	708	180	144	119	59	br.	br.	---	1
36.	9.1	---	1	1,270	691	180	140	115	53	blo.	bl.	---	---
37.	9.2	---	1	1,342	724	184	144	116	54	br.	bl.	---	1
38.	9.1	---	3	1,243	691	181	145	117	56	r. br.	bl.	2	3
39.	9.9	3	3	1,225	674	172	144	117	56	d. br.	gr.	6	1
40.	9.9	3	1	1,280	695	181	147	120	63	br.	bl.	2	---
41.	9.10	3	5	1,304	694	181	140	118	55	br.	bl.	2	2
42.	9.7	2	2	1,203	654	185	146	115	55	br.	l. br.	2	2
43.	9.0	2	2	1,294	685	183	153	122	60	d. blo.	bl.	1	1
44.	9.0	2	1	1,229	686	175	141	115	53	r.	bl.	---	2
45.	9.1	4	6	1,330	743	187	136	117	65	br.	l. br.	4	2
46.	9.4	4	3	1,312	703	189	138	116	69	br.	br.	1	1
47.	9.8	5	3	1,332	698	180	146	120	64	br.	l. br.	1	2
48.	9.11	4	2	1,245	675	193	150	120	72	blo.	g. bl.	1	---
49.	9.5	4	3	1,223	662	180	141	120	56	br.	gr.	2	1
50.	9.3	3	3	1,276	692	186	140	116	60	l. br.	gr.	---	1
51.	9.8	3	3	1,198	646	180	139	109	54	d. blo.	g. bl.	3	---
52.	9.3	3	4	1,304	666	180	149	122	60	blo.	gr.	---	3
53.	9.10	3	3	1,356	691	189	152	122	68	br.	bl.	3	---
54.	9.5	3	3	1,240	689	189	142	113	54	br.	gr.	---	4
55.	9.7	3	3	1,276	672	175	142	115	58	br.	g. bl.	1	3
56.	9.2	3	1	1,202	646	177	140	111	50	d. blo.	gr.	3	---
57.	9.0	3	1	1,295	672	166	140	115	57	r.	bl.	---	---
58.	9.10	4	2	1,285	683	165	135	111	59	l. br.	bl.	1	---
59.	9.8	2	1	1,331	701	180	144	120	66	br.	g. bl.	---	---
60.	9.4	3	1	1,260	678	187	142	118	60	r.	br.	---	2
61.	9.8	3	4	1,280	717	168	141	120	62	l. br.	l. br.	1	4
62.	9.5	2	3	1,296	686	182	145	114	59	d. br.	l. br.	---	3
63.	9.10	2	2	1,341	714	174	145	115	60	d. blo.	gr.	2	4
64.	9.7	2	1	1,211	665	176	156	122	57	d. blo.	bl.	2	2
65.	9.4	2	1	1,188	645	178	150	117	48	br.	bl.	4	1
66.	9.7	2	1	1,211	667	179	142	116	51	br.	br.	2	1
67.	9.3	2	10	1,264	693	185	146	122	65	d. br.	br.	1	8
68.	9.1	1	1	1,306	705	176	146	116	60	blo.	bl.	2	2
69.	9.0	1	3	1,168	656	177	142	110	48	r.	br.	1	1
70.	9.8	1	1	1,176	623	173	130	108	51	br.	br.	1	3
71.	9.11	5	4	1,319	724	190	153	116	67	br.	bl.	1	2
72.	9.4	4	2	1,243	680	174	142	120	53	d. blo.	g. bl.	---	1
73.	9.9	4	1	1,298	698	178	143	120	66	br.	bl.	---	1
74.	9.10	4	1	1,417	744	173	146	121	68	d. blo.	br.	---	---
75.	9.9	4	1	1,366	724	186	144	125	69	d. br.	lt. br.	---	---
76.	9.6	4	3	1,171	600	187	143	113	46	br.	bl.	4	---
77.	9.4	4	4	1,284	719	182	146	121	64	br.	bl.	1	2
78.	9.10	4	1	1,320	698	182	146	117	66	br.	d. br.	3	---
79.	9.7	3	1	1,228	670	180	142	114	51	d. br.	gr. bl.	---	---
80.	9.3	3	3	1,308	718	180	140	114	68	---	---	1	1

9-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
81	9.10	3	1	1,301	734	184	144	122	64	br.	gr. br.	1	—
82	9.5	3	6	1,297	667	181	150	123	77	blo.	bl.	3	3
83	9.4	3	2	1,306	737	185	144	120	77	br.	bl.	—	—
84	9.3	3	4	1,271	680	170	133	114	57	lt.	bl.	1	2
85	9.7	3	1	1,259	681	188	143	115	61	blo.	br.	—	—
86	9.0	3	1	1,170	660	171	142	117	58	blo.	bl.	—	1
87	9.5	—	4	1,326	690	182	145	120	65	br.	grn.	2	1
88	9.0	3	2	1,260	662	179	145	119	53	blo.	bl.	—	—
89	9.7	3	4	1,240	665	179	140	115	51	br.	bl.	—	2
90	9.6	3	5	1,200	634	181	150	117	59	br.	gr. br.	3	3
91	9.5	5	3	1,313	716	178	153	121	59	br.	gr.	4	4
92	9.11	4	1	1,316	689	181	140	116	55	br.	bl.	3	3
93	9.9	4	3	1,316	698	185	145	120	64	br.	grn-gr	2	2
94	9.4	3	3	1,323	663	182	136	115	49	d. blo.	bl.	1	1
95	9.1	3	3	1,310	674	184	135	115	56	d. br.	gr. br.	—	—
96	9.0	3	5	1,305	705	182	147	124	59	d. br.	bl.	1	3
97	9.3	3	6	1,245	688	182	140	115	54	d. br.	grn.	6	6
98	9.5	3	3	1,259	652	180	137	117	54	br.	bl.	3	3
99	9.5	10	11	1,175	610	165	140	112	48	d. br.	bl.	5	5
100	9.2	2	2	1,245	665	172	137	116	55	br.	br.	5	6
101	9.7	4	3	1,238	675	181	136	111	60	d. br.	d. br.	2	2
102	9.7	4	5	1,284	696	184	149	122	60	br.	bl.	2	2
103	9.7	4	3	1,227	682	179	136	115	60	br.	br.	3	3
104	9.3	4	2	1,228	673	180	138	108	51	d. br.	d. br.	2	1
105	9.3	4	2	1,314	706	192	151	125	63	r. br.	gr.	—	—
106	9.6	4	4	1,175	593	175	142	118	52	d. br.	bl.	1	2
107	9.6	4	4	1,286	697	187	145	120	61	br.	gr.	3	3
108	9.6	4	3	1,274	678	194	147	116	66	d. br.	g. bl.	1	1
109	9.7	4	3	1,290	655	195	144	121	62	d. br.	bl.	1	1
110	9.2	3	3	1,281	670	190	144	120	66	d. br.	gr.	3	—
111	9.11	3	2	1,311	652	182	143	118	53	br.	br.	—	1
112	9.1	3	1	1,195	638	186	140	116	51	br.	br.	2	1
113	9.10	3	3	1,305	712	187	136	114	64	br.	gr.	4	1
114	9.11	3	6	1,238	676	181	140	115	51	d. br.	br.	5	2
115	9.6	2	3	1,276	681	188	143	115	56	d. br.	br.	—	—
116	9.5	3	3	1,267	666	182	152	127	54	blo.	br.	1	1
117	9.4	3	1	1,287	672	184	141	112	51	l. br.	gr.	—	2
118	9.8	3	4	1,335	733	192	145	125	69	br.	gr.	2	2
119	9.2	2	2	1,241	650	176	140	110	48	br.	bl. gr.	—	—
120	9.10	5	—	—	—	—	—	—	—	—	—	1	2
121	9.1	4	2	1,265	666	182	143	112	50	br.	br.	—	—
122	9.7	4	1	1,241	673	174	156	119	58	blo.	bl.	1	1
123	9.4	4	4	1,263	645	179	146	118	58	br.	bl.	—	—
124	9.10	4	5	1,222	675	172	150	112	55	l. br.	g. bl.	4	5
125	9.3	3	3	1,267	710	189	148	123	60	blo.	g. bl.	—	1
126	9.8	3	3	1,322	666	177	143	122	63	br.	br.	—	1
127	9.5	3	2	1,332	695	195	140	114	58	d. br.	d. br.	1	1
128	9.5	3	3	1,261	664	182	150	116	59	blo.	gr.	1	1
129	9.3	3	3	1,214	646	181	141	115	54	br.	l. br.	2	2
130	9.9	2	2	1,298	732	185	145	117	61	d. blo.	bl.	1	1
131	9.11	4	2	1,410	733	196	143	124	77	d. blo.	g. bl.	—	—
132	9.3	1	1	1,175	614	168	144	122	49	d. br.	gr.	3	2
133	9.7	1	4	1,208	627	173	138	117	51	br.	d. br.	3	1
134	9.11	5	—	1,319	—	179	143	120	—	d. br.	d. br.	1	—
135	9.8	5	1	1,405	—	182	146	122	—	blo.	bl.	—	1
136	9.6	5	2	1,276	—	183	150	118	—	blo.	gr.	—	1
137	9.11	4	3	1,345	—	187	144	118	—	l. br.	bl.	1	1
138	9.3	4	8	1,342	—	184	139	117	—	d. br.	d. br.	2	6
139	9.9	2	3	1,309	—	175	145	126	—	d. blo.	gr.	1	3
140	9.5	3	1	1,334	—	180	144	121	—	d. br.	l. br.	—	—
141	9.8	3	2	1,322	—	180	138	123	—	blo.	d. br.	1	—
142	9.4	2	2	1,282	—	184	155	142	—	d. blo.	bl.	—	1
143	9.10	1	3	1,213	—	180	137	114	—	d. br.	gr.	2	—
144	9.9	2	4	1,230	—	168	141	115	—	d. br.	d. br.	1	4
145	9.6	2	4	1,261	—	180	141	116	—	d. br.	d. br.	3	5
146	9.5	3	2	1,328	—	187	146	118	—	d. br.	d. br.	1	1
147	9.5	3	1	1,328	—	185	140	118	—	d. br.	bl.	—	3
148	9.8	4	2	1,307	—	185	142	117	—	—	—	1	—
149	9.4	4	1	1,327	—	185	144	118	—	—	—	1	3
150	9.4	4	1	1,363	726	185	153	121	—	l. br.	l. br.	—	1
151	9.3	4	4	1,266	646	174	146	120	—	d. br.	d. br.	2	1
152	9.7	4	2	1,300	681	197	151	115	—	d. br.	bl.	2	1
153	9.3	4	2	1,275	635	184	142	109	—	d. br.	bl.	1	—
154	9.8	4	2	1,335	713	182	141	117	—	l. blo.	bl.	—	—
155	9.9	4	5	1,375	—	202	151	120	—	d. blo.	d. br.	1	4
156	9.7	4	1	1,354	—	190	146	118	—	d. br.	d. br.	—	—
157	9.5	4	2	1,317	—	182	145	121	—	d. br.	d. br.	3	—
158	9.6	5	8	1,300	—	177	151	116	—	d. blo.	bl.	2	5
159	9.9	5	4	1,315	—	187	144	120	—	d. blo.	bl.	1	2

9-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
160.....	9.4	4	3	1,172	725	177	146	118	72	l. br.	bl.	4	2
161.....	9.6	2	2	1,330	725	181	147	120	72	d. br.	gr.	---	---
162.....	9.5	3	1	1,163	725	175	137	108	72	d. br.	l. br.	---	---
163.....	9.5	3	1	1,246	725	176	144	119	72	d. br.	gr.	---	---
164.....	9.6	3	1	1,258	725	190	147	122	72	d. br.	gr.	---	---
165.....	9.4	3	3	1,307	725	172	143	121	72	d. br.	l. br.	---	---
166.....	9.4	3	3	1,213	725	176	138	114	72	d. blo.	bl.	---	---
167.....	9.6	4	10	1,325	705	183	146	119	64	r. blo.	bl.	---	---

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
168.....	9.0	2	1,225	660	335	63	61	179.....	9.0	2	1,203	645	330	64	53
169.....	9.9	4	1,196	670	320	60	55	180.....	9.4	3	1,279	685	340	62	52
170.....	9.0	4	1,265	685	335	64	60	181.....	9.3	3	1,305	690	351	65	61
171.....	9.0	---	1,201	665	320	64	---	182.....	9.7	3	1,273	680	345	64	56
172.....	9.5	---	1,175	635	305	56	43	183.....	9.7	---	1,266	668	346	63	55
174.....	9.1	4	1,256	770	360	63	64	184.....	9.10	3	1,223	665	325	66	54
175.....	9.3	4	1,363	725	380	68	73	185.....	9.1	---	1,223	665	335	70	67
176.....	9.0	4	1,246	675	335	61	52	186.....	9.11	4	1,240	678	333	65	58
177.....	9.0	---	1,275	680	330	65	55	187.....	9.10	3	1,351	710	360	59	58
178.....	9.0	2	1,306	710	355	71	61								

REPEATED MEASUREMENTS.

Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Width of hand.	Weight.	Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Width of hand.	Weight.
1.....	9.10	5	1,229	656	346	64	56	51.....	9.11	---	1,322	725	355	67	69
4.....	9.11	4	1,343	720	364	67	69	52.....	9.9	---	1,276	705	355	68	63
5.....	9.0	4	1,340	698	365	67	61	53.....	9.7	6	1,270	700	350	68	60
6.....	9.3	4	1,227	678	325	63	50	54.....	9.8	4	1,293	755	335	63	56
7.....	9.7	4	1,331	691	370	65	64	55.....	9.4	4	1,272	680	340	64	56
8.....	9.4	4	1,246	675	340	67	52	57.....	9.6	4	1,255	630	335	61	51
9.....	9.10	4	1,253	687	330	65	52	58.....	9.4	4	1,321	720	355	69	67
12.....	9.3	4	1,298	677	348	63	53	59.....	9.6	3	1,155	625	310	59	46
13.....	9.6	3	1,320	---	---	---	---	60.....	9.2	3	1,252	665	345	66	55
14.....	9.4	4	1,350	722	374	69	70	61.....	9.3	3	1,235	785	355	67	55
15.....	9.10	4	1,222	658	341	66	59	62.....	9.6	3	1,281	670	350	63	54
16.....	9.5	3	1,385	745	355	67	76	63.....	9.5	3	1,305	695	345	68	60
17.....	9.0	3	1,336	732	354	68	67	64.....	9.2	3	1,318	705	355	62	62
18.....	9.1	3	1,267	652	338	61	55	65.....	9.2	3	1,229	635	325	64	52
19.....	9.3	3	1,257	693	345	68	68	68.....	9.5	3	1,276	680	325	64	64
21.....	9.9	3	1,251	676	337	65	53	70.....	9.5	3	1,342	730	350	67	66
22.....	9.10	3	1,277	662	349	66	55	71.....	9.7	3	1,332	740	355	68	68
23.....	9.11	3	1,242	672	328	62	57	72.....	9.1	2	1,244	670	335	59	55
24.....	9.7	2	1,269	666	342	61	60	74.....	9.3	3	1,275	695	350	64	58
25.....	9.11	3	1,307	695	350	62	58	75.....	9.4	3	1,353	720	370	71	69
26.....	9.0	4	1,246	682	337	63	58	76.....	9.4	3	1,192	640	325	66	55
29.....	9.10	2	1,351	700	370	66	70	77.....	9.11	5	1,297	700	350	64	60
31.....	9.3	2	1,150	618	322	62	52	78.....	9.0	4	1,278	690	340	66	63
33.....	9.6	5	1,285	690	340	61	55	79.....	9.5	3	1,368	735	345	63	53
34.....	9.9	4	1,273	770	340	62	57	80.....	9.8	3	1,290	690	345	61	53
35.....	9.10	4	1,277	690	350	67	62	81.....	9.9	---	1,198	---	330	63	53
37.....	9.4	4	1,212	650	330	67	55	82.....	9.7	3	1,342	705	360	66	65
38.....	9.10	3	1,297	715	355	66	68	83.....	9.1	3	1,236	660	325	62	53
39.....	9.9	4	1,302	680	355	65	60	84.....	9.11	4	1,310	700	350	65	58
42.....	9.6	3	1,310	740	355	70	96	85.....	9.9	4	1,198	640	325	63	55
44.....	9.11	---	1,237	675	340	64	52	86.....	9.6	4	1,295	705	355	69	64
45.....	9.4	3	1,300	655	330	65	53	89.....	9.4	3	1,259	680	350	66	56
46.....	9.3	3	1,322	725	345	64	60	91.....	9.4	2	1,218	640	330	67	57
49.....	9.10	4	1,296	700	350	64	62	92.....	9.6	4	1,306	685	345	65	53
60.....	9.9	4	1,325	710	361	62	64								

9-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
131	1,335	104	---	---	---	150	1,406	151	103	---	---
132	1,247	93	---	---	---	151	1,226	153	103	---	---
133	1,228	95	---	---	---	152	1,303	100	---	---	---
135	---	110	177	---	---	153	1,258	145	100	---	---
136	---	97	152	---	---	154	1,315	150	104	---	---
137	---	96	157	---	---	155	---	144	96	66	---
138	---	109	162	---	---	156	---	157	105	66	---
139	---	91	146	---	---	157	---	152	95	67	---
140	---	92	160	---	---	158	---	148	94	68	---
141	---	108	156	---	---	159	---	154	102	66	---
142	---	98	160	---	---	160	---	146	94	---	---
143	---	96	142	---	---	161	1,370	147	98	66	355
144	---	90	150	---	---	162	---	155	91	61	315
145	---	93	153	---	---	163	---	154	96	65	340
146	---	104	158	---	---	164	---	139	90	64	340
147	---	102	152	---	---	165	---	163	103	64	335
148	---	155	97	66	---	166	---	155	91	60	335
149	---	139	96	65	---						

10-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	10. 11	6	2	1,390	747	180	146	117	67	d. br.	br.	---	2
2	10. 9	6	3	1,291	671	188	147	118	58	blo.	gr.	1	3
3	10. 7	---	a 1	1,399	768	188	142	121	76	br.	bl.	2	---
4	10. 5	5	1	1,360	715	192	148	122	65	blo.	gr. bl.	---	2
5	10. 4	5	5	1,334	712	181	142	121	70	d. br.	bl.	6	---
6	10. 6	5	2	1,241	650	185	147	119	57	l. br.	g. bl.	---	1
7	10. 11	---	5	1,353	709	189	146	115	66	br.	bl.	3	3
8	10. 1	5	2	1,273	710	177	148	114	53	br.	d. br.	1	2
9	10. 9	---	2	1,370	736	179	155	121	74	d. br.	gr.	1	---
10	10. 7	5	2	1,332	749	181	146	120	68	d. br.	bl.	---	1
11	10. 10	---	3	1,331	726	179	148	119	61	d. br.	br.	---	2
12	10. 10	---	4	1,349	731	195	152	124	76	blo.	g. bl.	3	1
13	10. 7	5	2	1,348	720	181	141	123	69	br.	br.	1	1
14	10. 1	---	3	1,325	671	182	146	123	63	br.	br.	2	---
15	10. 4	---	1	1,443	754	186	144	122	77	br.	g. bl.	---	---
16	10. 1	5	2	1,309	698	180	152	118	66	l. br.	bl.	2	2
17	10. 6	4	3	1,351	739	191	144	124	74	blo.	g. bl.	1	3
18	10. 3	4	2	1,269	677	180	145	119	55	blo.	gr.	1	2
19	10. 11	---	4	1,323	715	182	142	118	65	d. br.	br.	6	---
20	10. 2	---	2	1,383	742	187	142	123	78	br.	br.	---	1
21	10. 2	---	3	1,297	691	192	139	116	65	blo.	bl.	---	2
22	10. 6	3	1	1,348	717	182	148	121	66	br.	gr.	1	---
23	10. 11	---	4	1,265	682	179	142	112	64	d. br.	d. br.	3	---
24	10. 8	---	4	1,364	736	190	153	124	86	blo.	bl.	1	4
25	10. 0	---	1	1,440	727	185	---	119	74	br.	gr.	---	---
26	10. 0	4	3	1,354	720	179	153	118	64	l. br.	l. br.	1	2
27	10. 0	---	2	1,283	705	180	138	117	62	l. br.	gr.	2	1
28	10. 9	---	1	1,318	713	181	146	126	73	blo.	gr.	---	1
29	10. 2	4	2	1,303	686	181	139	113	56	br.	br.	2	6
30	10. 2	4	1	1,354	715	186	146	116	60	rd.	gr.	---	---
31	10. 11	4	2	1,219	642	177	141	117	56	d. br.	d. br.	---	1
32	10. 1	4	1	1,435	762	188	157	134	93	blo.	gr.	2	---
33	10. 9	4	2	1,358	710	182	151	122	67	blo.	bl.	3	---
34	10. 3	4	2	1,298	713	182	140	121	63	rd.	bl.	1	1
35	10. 1	3	2	1,436	766	190	145	123	82	br.	g. bl.	---	---
36	10. 2	3	1	1,399	748	179	157	131	75	l. br.	bl.	---	---
37	10. 4	---	2	1,368	738	185	149	124	67	br.	br.	1	1
38	10. 2	---	4	1,340	726	173	149	129	72	l. br.	bl.	2	2
39	10. 9	3	2	1,316	---	167	145	121	66	br.	g. bl.	1	3
40	10. 7	---	1	1,276	691	176	140	116	54	br.	bl.	---	5

a Of twins.

10-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
41.	10.6	6	5	1,291	681	179	138	120	59	br.	bl.	—	5
42.	10.1	4	4	1,233	678	178	143	118	55	d. blo.	g. bl.	2	2
43.	10.1	4	2	1,365	733	175	148	121	65	blo.	gr.	1	—
44.	10.1	4	4	1,245	667	176	143	121	52	d. blo.	—	—	5
45.	10.5	5	3	1,329	691	177	136	116	61	d. blo.	gr.	—	3
46.	10.7	5	1	1,429	752	188	142	120	73	br.	gr. br.	a 3	—
47.	10.5	5	1	1,294	694	181	140	118	63	br.	gr.	2	—
48.	10.8	5	3	1,441	768	187	143	125	82	br.	bl.	—	3
49.	10.9	5	2	1,423	727	177	146	123	71	blo.	l. br.	1	—
50.	10.8	3	2	1,364	712	181	141	120	70	br.	br.	1	—
51.	10.7	4	4	1,342	706	181	144	123	70	br.	gr.	—	2
52.	10.7	3	3	1,350	738	186	155	121	69	l. br.	gr.	2	1
53.	10.7	3	5	1,319	730	184	142	123	69	br.	br.	3	2
54.	10.8	3	1	1,307	697	169	138	116	61	d. br.	g. bl.	—	3
55.	10.0	2	3	1,280	693	184	138	119	56	br.	g. bl.	3	—
56.	10.8	6	1	1,346	720	181	142	118	64	br.	g. bl.	—	—
57.	10.5	6	2	1,455	783	182	145	122	101	br.	bl.	—	1
58.	10.6	5	3	1,307	711	186	149	127	68	br.	d. br.	2	—
59.	10.11	6	7	1,488	763	192	146	113	73	d. br.	d. br.	3	—
60.	10.6	5	2	1,404	783	184	139	124	90	d. br.	d. br.	1	7
61.	10.8	5	1	1,422	751	184	146	121	76	d. br.	bl.	—	—
62.	10.2	5	3	1,399	750	179	143	121	73	br.	bl.	1	1
63.	10.4	5	3	1,459	792	188	155	128	95	d. br.	l. br.	1	4
64.	10.9	5	1	1,395	719	169	141	117	66	br.	br.	—	—
65.	10.6	4	1	1,265	687	186	143	119	60	br.	bl.	1	—
66.	10.7	5	3	1,301	720	178	145	122	61	br.	bl.	—	3
67.	10.4	5	3	1,337	731	185	149	121	63	br.	bl.	1	2
68.	10.8	4	4	1,263	694	174	144	115	60	br.	br.	4	2
69.	10.10	4	1	1,341	744	180	138	113	67	d. blo.	br.	1	—
70.	10.0	4	5	1,291	690	164	140	117	57	—	—	3	3
71.	10.3	4	3	1,233	713	176	137	115	65	d. br.	bl.	2	1
72.	10.2	4	8	1,320	720	183	145	119	64	d. br.	bl.	3	4
73.	10.1	3	4	1,162	633	174	147	118	53	bla.	br.	2	2
74.	10.0	3	—	1,348	731	180	144	115	65	d. br.	d. br.	—	—
75.	10.3	3	4	1,218	675	178	148	117	56	br.	bl.	4	2
76.	10.7	2	2	1,228	668	179	139	110	52	d. br.	br.	2	3
77.	10.2	2	5	1,304	679	184	151	117	62	br.	bl.	3	—
78.	10.7	5	4	1,301	696	182	147	117	69	d. blo.	bl.	2	4
79.	10.6	5	5	1,384	745	181	146	119	66	br.	bl.	2	—
80.	10.7	5	3	1,381	750	180	150	128	69	d. br.	gr.	6	3
81.	10.7	5	1	1,331	721	187	147	122	65	rd. br.	br.	—	1
82.	10.1	4	1	1,291	706	187	143	121	65	br.	bl.	—	—
83.	10.7	4	1	1,313	694	185	145	119	59	br.	bl.	2	1
84.	10.3	4	3	1,400	747	186	146	121	77	br.	br.	1	1
85.	10.5	4	6	1,305	695	185	143	116	62	br.	br.	5	3
86.	10.5	4	4	1,323	701	173	149	117	67	br.	bl.	3	3
87.	10.6	3	2	1,325	681	177	145	122	59	d. br.	d. br.	3	—
88.	10.6	3	—	1,306	696	183	139	114	59	d. blo.	bl.	3	—
89.	10.9	3	3	1,276	675	189	145	120	67	l. br.	l. br.	2	5
90.	10.1	2	1	1,299	700	180	143	122	65	d. br.	d. br.	5	2
91.	10.8	2	1	1,262	660	177	136	113	54	d. br.	d. br.	—	—
92.	10.8	5	4	1,330	708	192	148	114	59	br.	d. bl.	—	2
93.	10.1	5	2	1,312	728	190	145	117	65	br.	g. bl.	1	—
94.	10.10	5	1	1,344	726	175	143	118	64	br.	gr.	3	1
95.	10.8	5	1	1,295	688	165	140	113	51	br.	bl.	2	1
96.	10.0	4	6	1,231	701	176	135	117	59	d. br.	d. br.	4	3
97.	10.0	5	2	1,364	724	183	142	123	74	br.	bl.	1	—
98.	10.3	4	2	1,334	741	181	146	121	70	br.	bl.	—	1
99.	10.11	4	4	1,306	727	181	151	127	71	d. br.	d. br.	3	—
100.	10.3	4	2	1,315	714	180	146	122	64	br.	gr.	1	1
101.	10.0	3	2	1,348	695	185	143	122	69	d. br.	d. br.	1	1
102.	10.1	3	1	1,352	713	175	148	126	60	d. br.	d. br.	1	—
103.	10.2	3	1	1,280	640	189	141	116	55	br.	g. bl.	1	—
104.	10.1	3	2	1,358	734	184	144	117	71	d. br.	d. br.	2	1
105.	10.0	3	2	1,342	706	195	144	114	64	br.	d. br.	4	1
106.	10.0	2	2	1,296	731	187	148	120	66	br.	br.	—	1
107.	10.9	6	2	1,385	750	191	140	121	75	d. br.	gr.	—	1
108.	10.10	5	4	1,340	715	187	146	117	72	br.	br.	3	—
109.	10.2	5	2	1,245	659	179	139	117	54	blo.	bl.	1	—
110.	10.0	4	1	1,346	676	188	137	112	62	br.	l. br.	1	—
111.	10.2	4	1	1,349	710	185	143	117	63	blo.	bl.	1	—
112.	10.9	4	4	1,314	681	178	144	115	61	blo.	g. bl.	3	—
113.	10.5	4	4	1,322	715	171	149	121	66	l. br.	br.	3	—
114.	10.3	4	3	1,395	728	183	148	125	75	d. blo.	l. br.	3	—
115.	10.5	4	3	1,319	695	179	143	119	65	—	—	—	2
116.	10.8	4	3	1,383	714	184	144	118	83	br.	gr. bl.	3	—
117.	10.3	4	2	1,400	726	183	151	126	74	br.	br.	1	—

a Half.

10-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
118.....	10.3	4	5	1,360	683	184	144	119	65	br.	bl.	1	3
119.....	10.6	4	2	1,379	703	192	147	121	66	br.	d. br.	1	3
120.....	10.0	3	1	1,374	723	184	147	126	78	br.	br.		
121.....	10.3	3	2	1,321	704	170	139	119	58	br.	bl.		1
122.....	10.4	3	1	1,263	670	187	148	122	57	d. blo.	l. br.		1
123.....	10.1	3	3	1,253	674	181	143	112	47	d. blo.	bl.	1	2
124.....	10.10	5	5	1,254	.....	179	138	115	.....	d. blo.	bl.	1	1
125.....	10.4	5	5	1,407	.....	178	154	128	.....	d. blo.	bl.	4	1
126.....	10.10	4	4	1,378	.....	189	142	119	.....	d. br.	bl.	2	1
127.....	10.10	3	1	1,373	.....	178	151	127	.....	rd.	bl.		
128.....	10.5	3	2	1,333	.....	181	141	114	.....	d. br.	d. br.	2	.....
129.....	10.10	3	3	1,385	742	174	144	117	.....	d. blo.	d. br.	2	1
130.....	10.1	3	2	1,387	.....	180	140	123	.....	d. blo.	bl.	3	1
131.....	10.10	3	1	1,445	.....	183	149	127	.....	d. blo.	gr.		3
132.....	10.10	4	4	1,362	.....	189	159	129	.....			2	
133.....	10.0	4	1	1,363	.....	182	149	127	.....	d. br.	d. br.	1	.....
134.....	10.2	4	2	1,304	734	180	142	120	.....	d. br.	gr.	4	.....
135.....	10.7	4	5	1,360	701	176	141	116	.....	d. br.	gr.	4	1
136.....	10.6	4	1	1,415	728	190	139	115	.....	d. br.	bl.	1	.....
137.....	10.10	4	3	1,324	682	174	140	113	.....	d. br.	gr.	2	1
138.....	10.11	4	1	1,409	.....	175	142	124	.....	d. br.	d. br.		
139.....	10.9	5	1	1,375	.....	180	144	130	.....	d. br.	l. br.	1	1
140.....	10.5	4	2	1,363	.....	185	146	122	.....	d. br.	bl.	2	1
141.....	10.11	4	3	1,341	.....	183	141	115	.....	d. blo.	d. br.		2
142.....	10.1	5	5	1,281	.....	187	138	119	.....	d. blo.	gr.	1	.....
143.....	10.4	5	5	1,328	683	183	141	115	.....	l. blo.	bl.	4	1
144.....	10.5	5	5	1,298	.....	180	142	116	.....	d. br.	g. bl.	2	2
145.....	10.2	5	5	1,252	.....	179	150	125	.....	d. br.	bl.	2	1
146.....	10.4	5	1	1,352	.....	183	142	121	.....	l. br.	g. bl.		1
147.....	10.7	5	5	1,405	.....	183	142	120	.....	d. br.	bl.	3	4
148.....	10.7	6	6	1,371	.....	199	150	124	.....	l. br.	l. br.		1
149.....	10.6	4	2	1,332	.....	183	146	123	.....	d. br.	gr.		1
150.....	10.5	4	2	1,245	.....	182	146	122	61	d. br.	l. br.	1	.....
151.....	10.0	3	1	1,252	.....	173	144	119	.....	l. br.	l. br.	2	2
152.....	10.8	4	1	1,307	.....	188	140	119	.....			2	.....
153.....	10.9	4	1	1,301	.....	178	137	114	.....	d. blo.	bl.		.....

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
154.....	10.6	5	1,410	750	370	66	72	163.....	10.6	4	1,349	.....	375	68	72
155.....	10.0	4	1,260	700	345	65	63	164.....	10.7	3	1,332	705	350	68	62
156.....	10.0	3	1,230	655	330	61	46	165.....	10.9	5	1,375	740	380	78	71
157.....	10.5	5	1,335	700	360	69	69	166.....	10.4	5	1,380	740	385	68	77
158.....	10.0	.....	1,231	665	340	62	56	167.....	10.0	2	1,247	680	345	64	58
159.....	10.9	6	1,392	730	370	66	62	168.....	10.4	3	1,214	675	330	66	51
160.....	10.5	4	1,272	695	340	67	60	169.....	10.2	2	1,355	755	365	65	72
161.....	10.2	4	1,353	740	355	67	69	170.....	10.4	4	1,268	690	340	70	62
162.....	10.5	5	1,342	740	380	72	72	171.....	10.4	5	1,373	735	370	72	85

10-year-old boys. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
3	10.6	6	1,323	714	371	66	62	56	10.3	4	1,252	680	350	65	55
4	10.2	6	1,417	745	395	69	74	57	10.9	4	1,351	705	365	68	62
5	10.2	6	1,352	738	362	70	73	59	10.9	3	1,388	745	385	70	72
6	10.5	6	1,450	770	392	74	75	60	10.6	4	1,306	700	455	67	68
7	10.9	7	1,292	697	357	63	64	61	10.8	4	1,350	740	355	72	69
8	10.6	5	1,286	698	355	65	66	62	10.6	3	1,362	740	365	68	62
10	10.10	5	1,332	699	375	67	76	64	10.8	5	1,257	680	345	66	60
13	10.1	5	1,405	760	375	70	73	65	10.5	5	1,215	650	330	63	61
15	10.7	5	1,331	720	360	67	70	66	10.7	5	1,262	695	325	65	60
16	10.10	5	1,313	678	358	66	60	71	10.6	5	1,383	655	365	70	71
17	10.1	5	1,318	690	370	68	63	74	10.5	5	1,460	700	395	68	72
18	10.8	5	1,344	710	366	67	69	76	10.7	5	1,211	640	320	65	49
19	10.7	5	1,373	722	380	71	74	78	10.8	5	1,365	715	375	68	67
20	10.8	4	1,263	682	330	63	55	79	10.8	4	1,267	765	340	66	54
21	10.3	3	1,415	752	395	70	80	80	10.4	4	1,366	740	365	75	73
24	10.5	4	1,278	682	332	65	58	81	10.11	4	1,351	740	360	70	69
25	10.2	4	1,324	726	356	70	64	82	10.4	4	1,362	725	360	72	91
26	10.8	4	1,444	753	408	75	87	83	10.4	4	1,460	740	410	71	87
27	10.4	3	1,279	670	358	68	55	85	10.7	4	1,322	695	355	67	68
28	10.1	4	1,412	748	400	70	72	86	10.2	3	1,230	660	335	63	56
29	10.5	4	1,263	661	353	61	51	88	10.1	3	1,323	695	350	65	60
30	10.4	4	1,385	713	378	70	69	93	10.7	5	1,361	730	355	70	67
31	10.10	4	1,276	668	347	68	63	95	10.6	4	1,345	710	360	64	59
32	10.6	4	1,306	715	345	68	65	96	10.9	4	1,356	745	390	70	71
34	10.2	4	1,248	675	357	71	59	98	10.5	5	1,309	705	355	67	58
35	10.4	4	1,413	714	405	67	68	99	10.4	3	1,212	645	325	61	54
36	10.2	4	1,318	710	354	63	56	101	10.8	5	1,293	715	350	74	67
37	10.2	3	1,408	770	400	70	73	102	10.8	4	1,341	735	370	70	65
38	10.1	3	1,283	702	345	66	64	103	10.8	5	1,280	700	345	71	65
40	10.10	4	1,322	706	358	68	68	104	10.3	5	1,285	700	345	66	56
41	10.10	4	1,358	721	477	67	70	105	10.3	5	1,361	725	370	70	72
42	10.4	3	1,251	665	335	64	57	106	10.6	4	1,226	640	335	63	56
44	10.0	3	1,264	695	328	64	57	107	10.5	5	1,336	715	365	72	67
45	10.2	5	1,396	765	380	72	71	112	10.2	4	1,237	680	320	64	54
47	10.8	6	1,382	745	370	70	74	114	10.11	4	1,274	685	340	64	56
49	10.6	5	1,267	685	345	62	57	115	10.5	3	1,317	690	350	64	61
50	10.4	3	1,324	720	365	69	65	116	10.1	3	1,317	695	375	61	59
51	10.8	4	1,232	660	345	64	58	117	10.4	4	1,337	695	355	60	54
52	10.4	4	1,350	705	355	66	66	118	10.6	4	1,373	750	372	71	75
53	10.11	4	1,382	730	380	70	75	119	10.0	3	1,287	655	355	66	59
54	10.7	4	1,301	705	340	65	59								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
126	.....	101	155	.....	.....	140	.....	162	102	71	.....
127	.....	104	157	.....	.....	141	.....	155	94	64	.....
128	.....	99	148	.....	.....	142	.....	158	91	67	.....
129	.....	112	162	.....	.....	143	.....	154	91	68	.....
130	.....	100	158	.....	.....	144	.....	144	91	65	.....
131	.....	102	149	.....	.....	145	.....	159	91	65	.....
132	.....	163	98	71	.....	146	.....	155	94	67	.....
133	.....	152	95	74	.....	147	.....	156	97	68	.....
134	1,403	153	102	.....	.....	148	.....	160	111	69	.....
135	1,380	151	105	.....	.....	149	.....	161	100	72	365
136	1,373	155	111	.....	.....	150	.....	152	96	71	340
137	1,305	150	96	.....	.....	151	.....	149	96	65	535
138	.....	157	100	69	.....	152	.....	.....	.....	65	340
139	.....	141	91	69	.....	153	.....	157	97	66	340

11-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	11.9		4	1.380	720	183	150	129	70	blo.	gr.	2	1
2.	11.9		2	1.372	700	178	140	121	70	d. br.	gr. bl.	1	
3.	11.6		1	1.390	714	183	142	124	71	l. br.	g. bl.	2	
4.	11.11	6	1	1.457	742	178	146	126	80	br.	bl.		3
5.	11.1	6	2	1.447	765	180	145	123	78	r. br.	gr.	1	4
6.	11.2	6	1	1.278	666	179	142	119	57	br.	gr.	1	1
7.	11.10	6	1	1.381	748	192	149	119	68	l. br.	br.	1	2
8.	11.8		4	1.313	719	187	143	121	73	d. br.	gr. br.	1	3
9.	11.9	6	8	1.371	732	192	148	121	75	d. br.	br.	1	6
10.	11.3	6	2	1.461	750	183	154	131	78	d. br.	d. br.		3
11.	11.10		5	1.445	742	181	146	126	80	br.	g. bl.	3	1
12.	11.7		3	1.393	727	172	148	122	66	br.	bl.	1	3
13.	11.2	5	4	1.435	757	177	143	121	77	blo.	gr.	1	2
14.	11.7		2	1.421	747	190	145	121	70	br.	g. bl.		1
15.	11.6	5	1	1.333	701	184	148	124	70	black.	d. br.		4
16.	11.11		1	1.311	682	182	144	119	64	br.	d. br.		
17.	11.1		3	1.408	728	190	142	120	75	blo.	g. yel.	1	1
18.	11.6		1	1.297	708	187	147	125	70	blo.	bl.		
19.	11.5	5	3	1.467	736	180	147	128	86	black.	d. br.	1	3
20.	11.11	4	1	1.253	655	186	148	121	61	blo.	gr.		
21.	11.8	4	3	1.350	707	180	153	120	71	br.	bl.	3	2
22.	11.6	5	1	1.266	671	180	142	116	56	br.	gr.		
23.	11.9		2	1.296	687	177	149	119	65	d. br.	bl.	5	1
24.	11.7		2	1.356	737	182	143	118	70	blo.	bl.	2	2
25.	11.6		5	1.302	723	179	143	124	75	br.	br.	3	3
26.	11.1	2	4	1.388	727	187	141	113	46 (?)	d. blo.	d. blo.		
27.	11.10		1	1.434	758	186	145	124	93	d. blo.	gr.	2	2
28.	11.4	6	4	1.453	763	183	134	111	79	br.	br.	2	1
29.	11.5	4	3	1.373	736	184	140	118	74	d. blo.	bl.	2	2
30.	11.2	4	2	1.360	730	185	136	112	65	br.	bl.	1	2
31.	11.3	5	3	1.289	669	171	135	113	57	d. blo.	gr. bl.	1	1
32.	11.7	5	3	1.369	726	186	145	123	76	br.	gr. br.	1	1
33.	11.5	5	3	1.330	681	175	139	118	63	br.	gr. br.	3	
34.	11.2	5	4	1.282	685	187	145	124	64	blo.	bl.	4	1
35.	11.3	5	3	1.439	750	186	153	123	76	br.	br.	3	2
36.	11.10	5	5	1.446	791	178	141	122	80	bl.	br.	1	5
37.	11.9	7	1	1.331	711	179	140	119	58	br.	br.		1
38.	11.4	5	4	1.389	745	185	142	119	76	br.	bl.	2	3
39.	11.6	4	5	1.377	730	175	148	119	67	rd.	bl.	3	1
40.	11.0	3	3	1.427	768	182	139	110	70	blo.	bl.	2	4
41.	11.2	3	2	1.408	752	187	149	128	81	d. br.	bl.	2	5
42.	11.3	3	4	1.341	717	178	139	116	60	br.	bl.	2	2
43.	11.9	3	15	1.307	723	171	143	118	63	d. br.	br.	3	13
44.	11.2	2	4	1.393	744	181	146	126	75	d. br.	gr.	3	3
45.	11.0	2	7	1.239	719	177	144	118	61	br.	d. br.	3	3
46.	11.0	2	1	1.240	673	171	144	116	55	d. blo.	gr. bl.		
47.	11.9	7	1	1.603	823	193	154	140	94	rd.	gr.		
48.	11.6	7	1	1.662	831	189	144	130	113	blo.	bl.	1	
49.	11.2	6	2	1.346	705	180	147	120	66	br.	br.	1	
50.	11.1	6	4	1.416	740	184	147	116	76	blo.	br.	1	2
51.	11.0	5	4	1.383	745	188	138	116	70	blo.	bl.	3	1
52.	11.4	5	5	1.285	682	184	138	113	63	br.	gr.	2	2
53.	11.5	5	2	1.735	761	186	143	123	81	br.	br.	1	
54.	11.9	5	4	1.531	791	188	146	127	90	blo.	bl.	1	2
55.	11.0	5	10	1.406	741	174	145	123	74	br.	bl.	4	5
56.	11.1	5	5	1.455	750	183	153	123	83	d. bl.	bl.	3	2
57.	11.7	4	3	1.331	698	181	148	120	63	d. br.	gr. bl.	1	2
58.	11.6	4	1	1.445	773	189	144	131	107	d. br.	lt. br.		
59.	11.2	4	2	1.406	752	189	150	124	83	d. br.	bl.	4	2
60.	11.11	3	2	1.380	707	180	140	115	78	blo.	bl.	1	2
61.	11.0	3	1	1.350	702	175	139	114	67	blo.	bl.	3	4
62.	11.6	7	5	1.304	663	172	144	120	65	br.	br.	3	3
63.	11.9	7	5	1.465	754	187	151	129	85	blo.	bl.	3	1
64.	11.9	6	4	1.441	771	194	140	119	118	blo.	gr.	1	2
65.	11.5	6	2	1.342	648	179	146	116	64	br.	gr.	1	
66.	11.7	6	4	1.384	704	187	151	122	63	br.	bl.		3
67.	11.3	5	5	1.372	717	191	150	125	73	br.	br.	5	1
68.	11.3	5	3	1.356	719	179	137	115	64	br.	br.	2	
69.	11.9	4	1	1.381	742	191	144	118	75	br.	bl.		
70.	11.10	4	7	1.429	761	188	152	126	96	br.	br.	3	3
71.	11.2	4	5	1.360	709	170	143	125	66	br.	bl.		6
72.	11.1	4	2	1.373	716	184	150	116	66	rd.	br.	1	5
73.	11.9	4	2	1.371	738	181	139	121	72	d. br.	br.	2	2
74.	11.8	4	3	1.367	716	187	142	124	84	d. br.	lt. r.	3	
75.	11.0	3	3	1.327	712	176	140	123	59	br.	br.		2

11-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
76	11.3	3	1	1,314	707	170	149	121	64	dk. br.	dk. br.	5	---
77	11.0	3	6	1,332	710	190	135	117	64	br.	gr.	4	2
78	11.9	4	1	1,385	726	196	148	117	72	br.	gr.	1	---
79	11.2	3	1	1,305	678	183	141	114	56	br.	bl.	2	1
80	11.5	6	3	1,375	730	179	140	118	76	br.	bl.	1	2
81	11.8	6	6	1,382	730	190	141	119	69	br.	gr.	3	2
82	11.10	6	3	1,408	743	185	140	125	74	br.	gr. bl.	4	3
83	11.7	6	1	1,436	725	186	141	119	74	bla.	gr.	---	1
84	11.10	6	4	1,422	754	185	143	124	81	br.	gr.	2	1
85	11.6	6	2	1,464	724	190	151	130	89	lt. br.	bl.	3	---
86	11.11	6	2	1,308	730	187	145	125	63	br.	br.	---	1
87	11.6	6	5	1,282	672	180	147	125	69	br.	br.	4	7
88	11.11	6	2	1,379	713	179	149	127	68	br.	bl.	---	2
89	11.6	5	2	1,420	745	187	145	126	71	br.	gr.	7	3
90	11.6	5	2	1,503	677	182	146	118	59	br.	bl.	1	2
91	11.0	5	1	1,390	713	192	150	121	67	br.	br.	1	1
92	11.3	5	1	1,337	664	186	146	118	59	br.	gr.	---	---
93	11.3	5	4	1,347	722	202	151	122	82	br.	br.	3	---
94	11.0	4	3	1,285	689	189	140	119	67	br.	bl.	2	---
95	11.0	4	3	1,347	708	184	146	120	86	rd. br.	bl.	3	1
96	11.1	4	1	1,418	751	181	148	122	69	br.	br.	2	1
97	11.5	4	3	1,195	683	178	145	124	64	br.	gr. bl.	2	4
98	11.0	3	5	1,233	625	170	139	121	35	br.	gr. br.	1	1
99	11.11	3	9	1,345	695	185	144	125	76	br.	br.	4	4
100	11.6	5	1	1,380	688	184	137	118	62	br.	br.	---	1
101	11.0	3	1	1,265	692	180	137	111	56	blo.	gr. bl.	---	---
102	11.11	3	5	1,280	680	191	144	112	65	br.	br.	4	---
103	11.6	6	2	1,374	755	182	153	127	74	br.	gr. bl.	---	---
104	11.7	6	4	1,434	739	187	149	116	70	br.	bl.	4	2
105	11.1	6	2	1,328	714	180	148	117	64	blo.	bl.	---	1
106	11.7	6	1	1,351	679	172	141	115	74	blo.	gr.	---	---
107	11.9	5	1	1,376	701	188	139	124	74	br.	gr. bl.	1	2
108	11.8	5	1	1,372	707	178	139	117	65	dk. blo	gr.	---	---
109	11.11	4	2	1,315	681	187	137	113	60	dk. blo	l. br.	1	---
110	11.4	4	2	1,456	736	183	145	124	70	br.	bl.	---	1
111	11.5	4	4	1,414	722	186	147	118	71	br.	br.	1	1
112	11.0	4	2	1,330	670	188	145	122	61	br.	gr. bl.	---	---
113	11.6	3	2	1,344	653	181	144	120	66	lt. br.	lt. br.	2	1
114	11.2	3	3	1,334	698	184	142	118	66	br.	bl.	---	1
115	11.6	3	2	1,382	---	184	142	123	---	dk. blo	bl.	2	---
116	11.7	7	7	1,387	---	197	141	118	---	rd. br.	lt. br.	1	3
117	11.7	6	2	1,325	---	193	141	113	---	gr.	br.	---	---
118	11.4	5	4	1,347	---	186	148	124	---	dk. br.	gr. bl.	1	2
119	11.7	5	2	1,328	---	182	131	114	---	blo.	br.	---	2
120	11.3	5	7	1,287	---	170	151	116	---	dk. br.	bl.	4	4
121	11.1	3	3	1,367	---	189	136	121	---	blo.	gr.	---	1
122	11.8	4	2	1,423	---	180	150	127	---	blo.	bl.	1	---
123	11.9	4	2	1,325	716	181	151	123	---	br.	bl.	2	2
124	11.11	4	4	1,438	764	170	151	124	---	dk. br.	gr. bl.	3	1
125	11.8	4	6	1,366	705	184	147	115	---	l. blo.	bl.	2	2
126	11.5	4	1	1,430	752	182	150	126	---	l. br.	bl.	1	1
127	11.1	4	10	1,408	---	185	151	128	---	dk. br.	dk. br.	5	4
128	11.2	5	1	1,394	---	187	145	122	---	dk. blo	bl.	1	---
129	11.0	5	7	1,385	---	174	150	123	---	dk. br.	bl.	1	5
130	11.1	5	6	1,362	---	204	147	122	---	lt. br.	lt. br.	4	1
131	11.10	5	1	1,451	---	194	141	119	---	dk. br.	bl.	---	---
132	11.4	5	2	1,286	---	187	151	131	---	lt. br.	lt. br.	1	6
133	11.10	6	3	1,383	---	188	149	124	---	blo.	bl.	2	3
134	11.10	6	2	1,382	---	178	152	124	---	dk. br.	dk. br.	---	4
135	11.11	6	1	1,345	---	184	137	120	---	lt. br.	bl.	2	---
136	11.1	6	1	1,405	---	185	146	121	---	lt. br.	lt. br.	---	---
137	11.6	6	1	1,690	---	204	153	133	---	dk. blo	gr.	1	---
138	11.10	6	1	1,372	---	173	151	125	---	dk. blo	gr.	---	1
139	11.8	7	3	1,485	---	188	149	133	---	dk. br.	dk. br.	2	3
140	11.7	7	3	1,341	703	188	151	131	---	dk. br.	gr. br.	1	1
141	11.1	5	4	1,336	---	185	147	121	---	dk. br.	lt. br.	2	4
142	11.4	4	3	1,235	---	180	146	117	---	blo.	bl.	2	4
143	11.1	4	4	1,493	---	182	144	118	---	d. blo.	bl.	2	1
144	11.3	4	1	1,265	---	176	140	114	53	d. br.	gr.	1	1
145	11.8	4	2	1,356	---	180	147	116	63	l. br.	bl.	1	---
146	11.9	5	4	1,424	---	189	139	120	---	d. br.	l. br.	2	4
147	11.0	3	7	1,366	---	185	144	123	---	l. br.	bl.	5	1
148	11.6	3	2	1,247	---	182	134	112	---	d. br.	l. br.	2	8

*Half sister.

11-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
149	11.9	5	1,480	785	400	77	94	161	11.6	6	1,472	790	415	72	82
150	11.2	4	1,255	665	325	62	57	162	11.9	5	1,423	755	375	68	71
151	11.0	5	1,464	750	380	66	84	163	11.3	5	1,335	685	358	66	57
152	11.11		1,252	670	345	63	52	164	11.9	4	1,263	673	352	70	60
153	11.2	4	1,397	720	370	65	76	165	11.5	5	1,355	735	370	65	67
154	11.0	4	1,440	770	370	68	88	166	11.3	6	1,434	745	395	73	79
155	11.5	3	1,378	730	370	70	71	167	11.0	6	1,292	785	330	63	60
156	11.2	4	1,413	775	385	74	76	168	11.3	4	1,358	765	360	65	58
157	11.7	5	1,433	783	401	78	105	169	11.7		1,212	640	340	67	
158	11.2	4	1,325	705	365	69	61	170	11.2	4	1,432	740	390	71	77
159	11.0	5	1,308	695	360	64	65	171	11.0	5	1,306	720	370	70	89
160	11.5	6	1,372	730	360	70	65	172	11.9	4	1,400	745	370	72	72

REPEATED MEASUREMENTS.

Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1	11.11	7	1,437	768	383	63	77	59	11.9	4	1,419	740	400	72	76
2	11.10	7	1,339	694	365	68	60	52	11.7	4	1,390	765	370	70	76
4	11.5	6	1,414	733	398	62	70	53	11.7	4	1,360	765	375	70	76
5	11.10	6	1,421	770	380	67	82	54	11.8	4	1,352	720	360	68	60
6	11.6	6	1,233	675	365	64	63	58	11.6	6	1,363	740	375	68	77
7	11.4	6	1,406	738	396	69	71	61	11.3	5	1,467	760	390	72	79
9	11.9	6	1,426	771	375	71	87	62	11.1	6	1,442	765	390	72	75
10	11.7	5	1,371	755	367	66	73	63	11.4	6	1,514	820	400	74	110
12	11.7	6	1,396	755	380	70	81	64	11.4	5	1,453	750	390	71	69
13	11.7	6	1,390	730	382	70	74	65	11.1	5	1,314	700	360	68	66
14	11.0	6	1,385	723	390	71	70	63	11.7		1,340	720	355	67	66
15	11.5	6	1,491	786	395	69	80	67	11.4	6	1,383	745	370	70	69
16	11.1	6	1,371	723	370	67	72	68	11.9	5	1,315	700	350	62	67
17	11.5	5	1,408	868	378	77	84	69	11.11	5	1,403	765	375	76	73
18	11.2	5	1,320	703	360	65	59	70	11.1	5	1,342	705	370	68	60
19	11.11	5	1,381	745	370	68	77	74	11.2	4	1,401	765	370	72	71
21	11.3	5	1,340	715	355	64	70	77	11.3	3	1,364	705	365	70	62
22	11.5	5	1,408	752	400	67	73	78	11.7	6	1,345	715	380	71	73
24	11.8	5	1,424	774	392	72	107	82	11.2	5	1,340	720	360	65	72
25	11.1	5	1,483	750	425	69	79	85	11.1		1,367	740	360	72	
26	11.0	5	1,418	757	382	67	64	86	11.4	5	1,357	725	380	65	71
27	11.0	5	1,332	720	350	66	70	87	11.7	4	1,362	710	370	66	64
28	11.10	5	1,362	725	385	72	79	88	11.6	4	1,350	710	360	66	60
30	11.2	5	1,414	730	375	66	64	91	11.8	3	1,301	680	360	65	61
31	11.11	5	1,261	686	336	67	62	93	11.1	2	1,362	745	370	66	70
32	11.1	5	1,496	796	412	73	115	94	11.10	6	1,392	750	360	71	81
33	11.8	5	1,421	732	389	72	74	96	11.11	4	1,273	705	345	67	61
35	11.1	4	1,496	796	408	73	90	97	11.0	6	1,420	750	385	70	82
36	11.3	4	1,452	776	405	79	81	98	11.4	4	1,386	755	370	69	67
37	11.4	4	1,417	760	395	72	76	99	11.11	5	1,365	770	360	73	82
39	11.9	4	1,359	730	465	65	70	100	11.4	5	1,360	745	390	69	68
42	11.1	5	1,230	690	340	64	60	101	11.0	3	1,384	745	390	70	75
43	11.2	5	1,417	765	380	71	69	102	11.1	4	1,396	755	385	68	67
44	11.3	5	1,295	685	340	67	57	103	11.3	4	1,333	700	365	69	60
47	11.5	6	1,329	725	350	63	68	105	11.0	4	1,382	735	360	68	68
49	11.11	6	1,472	760	400	74	76	106	11.9	3	1,354	730	365	74	72

11-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
121		104	168			135		162	98	68	
122		150	95	69		136		160	100	72	
123	1,321	146	100			137		177	113	85	
124	1,486	108				138		158	103	76	
125	1,373	156	102			139		174	110	73	
126	1,427	165	108			140	1,342	158	101	66	
127		151	100	72		141		153	101	65	370
128		157	102	67		142		155	97	64	325
129		170	110	71		143		158	100	67	380
130		162	107	73		144		157	103	57	335
131		165	100	71		145		163	105	66	355
132		158	97	64		146		164	103	71	385
133		162	102	72		147		168	98	68	360
134		145	92	70		148		156	97	60	325

12-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	12.3		1	1,477	758	186	151	124	83	br.	bl.	1	2
2	12.10		1	1,526	820	183	146	124	90	d. br.	d. br.	1	1
3	12.2		1	1,545	803	187	153	128	176	bl.	bl.	1	1
4	12.11		1	1,520	776	176	143	126	86	br.	bl.	1	3
5	12.8		4	1,503	772	193	145	121	89	bla.	bl.	3	3
6	12.6	7	4	1,473	748	187	144	125	88	br.	br.	1	1
7	12.1	7	5	1,483	762	193	150	127	95	br.	br.	1	2
8	12.9	7	2	1,550	799	193	139	130	89	br.	bl.	1	1
9	12.3		3	1,463	769	187	141	116	78	blo.	gr. bl.	1	3
10	12.10		3	1,464	751	188	149	130	105	blo.	gr. bl.	1	1
11	12.11		4	1,600	897	183	141	125	101	br.	bl.	1	1
12	12.4		3	1,581	890	190	144	110	110	bla.	bl.	1	1
13	12.8		2	1,378	716	180	151	133	78	bla.	br.	1	1
14	12.7		2	1,438	755	182	135	131	88	d. br.	bl. gr.	1	1
15	12.1		2	1,450	749	186	150	121	80	br.	bl.	1	1
16	12.11		1	1,371	711	183	147	121	76	l. br.	l. bl.	1	1
17	12.10		1	1,490	747	183	147	119	81	l. br.	br.	1	1
18	12.10	6	2	1,513	801	192	148	126	88	r. br.	bl.	1	1
19	12.4	6	3	1,330	714	182	140	112	63	l. br.	bl.	1	1
20	12.7	6	1	1,377	731	191	145	119	74	blo.	g. bl.	2	2
21	12.3	6	2	1,317	690	184	150	120	55	br.	br.	1	1
22	12.5	6	1	1,464	785	183	145	121	96	l. br.	bl.	1	1
23	12.0		4	1,405	730	187	154	130	74	br.	l. br.	2	3
24	12.5		3	1,376	737	175	141	115	72	d. br.	l. br.	2	3
25	12.7	6	3	1,369	723	173	143	122	70	l. br.	br.	1	1
26	12.6	5	2	1,244	657	182	135	113	58	l. br.	gr.	2	2
27	12.0	5	2	1,428	737	183	146	121	70	d. br.	d. br.	2	2
28	12.4	5	1	1,384	710	170	140	117	62	d. br.	g. bl.	1	1
29	12.9	5	3	1,354	692	187	156	126	71	br.	bl.	2	1
30	12.4		1	1,482	760	179	150	123	88	l. br.	gr.	1	1
31	12.2	4	1	1,450	743	181	146	118	87	l. br.	bl.	1	1
32	12.5	8	2	1,620	831	188	147	126	110	d. br.	gr.	1	2
33	12.10	4	2	1,385	697	190	144	120	70	bla.	br.	1	1
34	12.2		7	1,376	734	181	142	119	72	br.	bl.	4	5
35	12.7		5	1,369	725	176	150	125	72	r.	gr.	3	4
36	12.1		4	1,373	743	179	154	133	81	d. br.	d. br.	3	4
37	12.11	6	3	1,403	732	180	143	118	70	bla.	bl.	3	2
38	12.0	6	1	1,507	772	182	152	126	89	br.	br.	1	1
39	12.3	6	1	1,489	770	183	143	124	83	br.	l. br.	2	2
40	12.0	6	1	1,389	732	186	152	125	74	blo.	bl.	1	1
41	12.1	6	2	1,497	818	185	149	128	92	br.	br.	3	2
42	12.11	6	1	1,354	700	179	146	121	75	l. br.	bl.	1	1
43	12.9	4	1	1,360	722	175	151	124	67	d. br.	br.	1	2
44	12.9	4	1	1,504	771	190	143	125	80				
45	12.0	6	1	1,356	704	183	140	122	64	bl.	gr.	1	2
46	12.10	6	1	1,479	779	179	151	128	83	br.	l. br.	2	1
47	12.2	5	2	1,439	751	185	149	122	76	br.	gr.	1	1

12-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
48	12.4	5	3	1,465	747	183	145	123	86	r.	bl.	3	---
49	12.10	5	1	1,493	743	181	137	123	82	blo.	gr.	1	---
50	12.6	5	5	1,352	695	174	137	123	68	br.	bl.	2	---
51	12.4	5	5	1,407	716	180	135	116	63	br.	gr.	1	---
52	12.7	7	1	1,458	766	187	155	125	91	blo.	gr.	---	---
53	12.10	7	3	1,484	784	196	145	125	27	br.	bl.	2	1
54	12.5	5	1	1,468	744	193	146	120	76	blo.	bl.	1	---
55	12.5	5	1	1,370	723	186	144	122	65	br.	bl.	1	---
56	12.1	4	1	1,406	719	179	141	127	71	blo.	br.	---	---
57	12.11	4	1	1,488	756	191	151	133	94	blo.	gr.	2	---
58	12.10	5	2	1,450	738	185	164	131	82	blo.	bl.	---	---
59	12.10	5	5	1,467	778	178	151	126	74	blo.	bl.	---	---
60	12.11	6	1	1,436	760	172	153	126	71	bla.	d. br.	3	---
61	12.11	4	6	1,462	785	172	152	123	73	br.	bl.	---	---
62	12.8	5	7	1,467	765	192	148	123	91	blo.	l. br.	3	---
63	12.4	5	7	1,346	689	172	136	115	66	br.	gr.	5	---
64	12.9	3	3	1,303	690	175	144	112	58	l. blo.	bl.	1	---
65	12.5	3	3	1,388	722	178	149	124	74	blo.	bl.	4	---
66	12.2	6	1	1,360	715	186	141	114	81	br.	bl.	---	---
67	12.10	6	1	1,376	730	168	143	120	73	d. br.	br.	1	---
68	12.11	6	6	1,515	805	185	145	120	90	blo.	bl.	---	---
69	12.11	6	2	1,443	759	185	151	118	80	blo.	gr.	1	---
70	12.8	6	3	1,355	724	186	143	116	73	br.	bl.	---	---
71	12.10	6	3	1,390	730	190	140	112	68	br.	gr.	1	---
72	12.7	6	8	1,443	720	186	140	112	73	d. br.	gr.	1	---
73	12.6	6	8	1,342	710	176	139	106	62	blo.	br.	---	---
74	12.9	6	5	1,403	767	182	143	116	73	bla.	bl.	3	---
75	12.8	6	4	1,420	736	180	139	124	75	d. br.	bl.	3	---
76	12.1	6	4	1,460	788	176	147	115	72	d. br.	bl.	2	---
77	12.10	6	1	1,478	774	185	140	112	82	r. br.	br.	---	---
78	12.5	5	3	1,368	745	191	155	121	75	br.	br.	2	---
79	12.7	5	1	1,433	717	192	143	122	71	d. br.	br.	2	---
80	12.4	5	3	1,464	750	174	136	118	73	blo.	bl.	1	---
81	12.8	5	3	1,453	769	178	136	124	80	br.	gr.	3	---
82	12.10	5	3	1,515	777	187	148	122	93	br.	bl.	4	---
83	12.1	4	3	1,374	754	182	143	114	73	br.	br.	---	---
84	12.3	4	3	1,360	733	181	143	121	65	r. br.	bl.	2	---
85	12.6	4	3	1,353	706	178	132	122	67	br.	bl.	4	---
86	12.6	8	6	1,500	780	199	156	129	95	d. br.	br.	3	---
87	12.5	8	4	1,463	750	184	144	126	81	blo.	bl.	3	---
88	12.10	7	2	1,481	753	187	159	138	88	r. blo.	br.	1	---
89	12.2	7	4	1,397	716	182	148	126	74	br.	bl.	---	---
90	12.5	7	3	1,401	735	191	149	127	70	br.	br.	2	---
91	12.2	7	3	1,451	754	178	147	124	83	d. br.	gr.	1	---
92	12.4	7	2	1,385	698	180	138	116	57	br.	bl.	1	---
93	12.8	6	2	1,490	804	192	148	124	84	br.	bl.	1	---
94	12.10	7	4	1,401	721	183	142	113	67	br.	d. br.	---	---
95	12.3	4	6	1,371	710	179	145	116	73	br.	bl.	1	---
96	12.4	4	3	1,338	704	186	146	120	71	d. br.	l. br.	2	---
97	12.11	3	3	1,407	735	189	150	123	81	br.	br.	---	---
98	12.11	11	3	1,410	727	170	140	115	76	br.	gr.	6	---
99	12.4	7	3	1,307	675	185	147	118	71	br.	d. br.	3	---
100	12.5	7	1	1,350	730	185	151	119	71	br.	gr.	---	---
101	12.10	7	1	1,416	749	193	150	126	77	d. br.	bl.	1	---
102	12.5	7	4	1,458	759	181	155	130	78	r. br.	gr.	3	---
103	12.1	7	7	1,498	785	176	150	118	80	br.	bl.	4	---
104	12.7	6	2	1,435	758	175	140	117	75	br.	bl.	5	---
105	12.11	6	3	1,344	705	174	144	121	60	d. br.	bl.	6	---
106	12.2	6	1	1,571	836	189	147	130	107	blo.	bl.	---	---
107	12.8	6	2	1,434	764	184	142	122	85	blo.	bl.	1	---
108	12.9	9	5	1,482	775	195	148	126	96	br.	br.	1	---
109	12.7	8	2	1,392	751	185	142	116	75	l. br.	bl.	3	---
110	12.8	8	3	1,408	753	194	149	128	83	br.	bl.	3	---
111	12.11	8	4	1,387	724	191	141	122	70	d. br.	gr.	1	---
112	12.1	5	3	1,418	765	175	145	125	77	l. br.	bl.	---	---
113	12.2	5	4	1,399	755	180	133	114	68	d. br.	bl.	---	---
114	12.10	5	4	1,409	736	178	136	115	68	br.	gr.	4	---
115	12.7	5	4	1,440	759	174	148	127	78	d. br.	gr.	1	---
116	12.11	5	2	1,367	742	172	149	129	68	l. br.	gr. bl.	1	---
117	12.1	5	4	1,336	707	175	139	119	66	d. br.	gr.	5	---
118	12.11	5	3	1,470	754	176	139	123	85	br.	bl.	1	---
119	12.0	5	3	1,349	694	184	144	125	64	d. br.	br.	3	---
120	12.10	8	5	1,442	743	193	155	133	79	br.	gr.	1	---
121	12.9	8	2	1,424	755	180	141	121	75	blo.	gr. bl.	5	---
122	12.10	8	4	1,611	845	190	162	135	130	blo.	gr. bl.	2	---
123	12.11	8	2	1,401	730	186	146	124	74	blo.	gr.	---	---
124	12.8	8	3	1,393	723	185	148	125	67	br.	br.	3	---
125	12.5	7	1	1,435	734	183	144	128	85	blo.	bl.	1	---
126	12.10	7	2	1,438	752	173	139	120	80	blo.	gr.	4	---

12-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
127	12.8	7	2	1,449	760	182	141	125	73	blo.	bl.	2	3
128	12.9	7	1	1,454	764	179	138	124	79	blo.	bl.	---	---
129	12.4	7	1	1,505	788	188	145	121	82	blo.	bl.	1	---
130	12.4	7	1	1,534	781	179	149	125	90	br.	br.	3	2
131	12.9	7	8	1,417	752	176	141	119	71	blo.	gr. bl.	4	4
132	12.3	7	1	1,356	730	179	139	118	64	blo.	bl.	---	1
133	12.4	7	1	1,417	728	180	148	123	72	blo.	bl.	---	---
134	12.4	6	1	1,408	724	187	146	125	72	blo.	br.	---	---
135	12.10	6	1	1,426	738	175	135	116	75	br.	gr.	2	---
136	12.5	5	3	1,449	762	182	137	115	70	blo.	l. br.	3	---
137	12.11	5	2	1,390	703	189	130	110	70	blo.	gr.	1	---
138	12.3	5	1	1,342	712	177	138	122	58	blo.	gr.	2	2
139	12.5	5	2	1,469	708	185	144	120	83	r. br.	l. br.	2	1
140	12.11	5	4	1,466	778	179	150	127	74	br.	l. br.	2	1
141	12.10	5	3	1,439	771	182	147	122	80	blo.	gr. bl.	1	1
142	12.3	4	6	1,406	740	189	143	123	76	br.	gr.	2	3
143	12.6	4	4	1,353	714	188	150	122	77	r. blo.	bl.	4	---
144	12.2	3	6	1,340	703	189	149	122	65	---	---	2	6
145	12.8	2	1	1,464	762	183	136	121	82	br.	l. br.	---	---
146	12.3	---	---	1,467	736	180	145	130	---	blo.	gr. bl.	1	---
147	12.11	---	3	1,355	699	182	134	118	---	br.	br.	1	2
148	12.9	---	2	1,459	792	197	138	125	---	br.	br.	---	---
149	12.6	---	2	1,454	---	182	147	123	---	d. br.	l. br.	2	1
150	12.8	7	1	1,480	---	181	142	124	---	d. br.	d. br.	---	---
151	12.6	7	1	1,516	---	193	139	127	---	blo.	bl.	1	2
152	12.0	7	3	1,477	---	193	147	120	---	blo.	bl.	2	---
153	12.7	7	6	1,529	---	192	150	130	---	blo.	bl.	3	3
154	12.10	7	5	1,509	---	190	147	126	---	d. br.	gr.	3	3
155	12.1	6	4	1,440	---	188	150	126	---	blo.	bl.	2	1
156	12.4	5	2	1,414	---	182	151	125	---	blo.	bl.	1	2
157	12.9	7	1	1,602	---	185	143	122	---	blo.	gr.	1	---
158	12.6	7	5	1,507	---	186	148	134	---	r. br.	d. br.	2	3
159	12.3	4	8	1,493	755	181	156	128	---	d. br.	bl.	3	2
160	12.1	4	4	1,447	736	184	152	130	---	d. br.	gr.	3	2
161	12.4	5	1	1,463	---	183	150	128	---	d. br.	gr.	1	1
162	12.5	5	5	1,427	---	183	149	123	---	l. br.	bl. gr.	3	1
163	12.3	5	1	1,444	---	183	141	119	---	d. br.	bl.	---	---
164	12.10	6	5	1,388	---	179	145	125	---	l. br.	bl.	5	3
165	12.6	6	3	1,332	---	178	141	117	---	d. br.	bl. gr.	2	3
166	12.1	6	3	1,382	---	178	147	121	---	d. blo.	gr.	---	2
167	12.5	7	1	1,491	759	183	145	125	---	d. blo.	bl.	---	---
168	12.3	---	---	1,347	716	179	145	118	---	br.	bl.	1	1
169	12.9	8	1	1,438	728	188	148	125	---	d. br.	bl.	1	1
170	12.1	8	2	1,426	760	185	150	122	---	r.	bl.	1	1
171	12.9	8	5	1,573	851	193	141	120	---	d. br.	d. br.	---	3
172	12.5	9	2	1,371	710	184	144	120	68	d. br.	d. br.	2	1
173	12.0	8	2	1,525	---	207	153	127	93	d. blo.	bl.	1	2
174	12.10	5	2	1,433	---	183	154	132	---	d. br.	gr.	3	3
175	12.11	5	---	1,423	755	182	143	120	80	---	---	---	---

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
176	12.7	5	1,368	740	365	70	65	190	12.8	---	1,381	720	370	70	69
177	12.4	5	1,462	775	385	66	76	191	12.11	6	1,449	760	400	74	86
178	12.7	4	1,305	710	340	68	65	192	12.8	6	1,424	760	395	70	72
179	12.11	8	1,393	720	375	68	74	193	12.7	6	1,253	665	350	67	64
180	12.7	6	1,482	785	400	71	79	194	12.11	5	1,386	740	395	66	63
181	12.6	7	1,336	710	360	68	61	195	12.10	5	1,520	825	415	83	99
182	12.11	7	1,440	755	390	68	79	196	12.4	4	1,377	740	380	66	52
183	12.11	7	1,486	780	400	76	97	197	12.7	5	1,345	700	365	66	61
184	12.8	5	1,425	765	380	76	80	198	12.6	6	1,445	775	385	70	72
185	12.11	7	1,522	775	470	70	75	199	12.11	7	1,392	720	375	68	66
186	12.6	6	1,487	800	390	77	91	200	12.2	5	1,322	670	335	63	58
187	12.10	5	1,400	750	380	74	70	201	12.5	4	1,510	820	400	76	113
188	12.6	7	1,504	800	400	77	117	202	12.1	4	1,448	750	385	70	73
189	12.4	4	1,441	740	390	66	74	203	12.11	6	1,423	749	400	77	83

12-year-old boys. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1	12.8	2	1,422	734	371	75	75	53	12.5	6	1,492	765	415	73	88
2	12.9		1,433	778	386	75	75	54	12.9	6	1,577	780	420	76	103
4	12.11		1,521	780	407	81	88	55	12.1	5	1,455	765	395	70	79
6	12.3		1,323	708	361	64	61	56	12.2	5	1,510	800	400	75	91
8	12.8		1,364	744	367	67	68	57	12.3	5	1,385	720	395	72	70
9	12.8		1,428	756	398	74	80	58	12.1	5	1,540	890	420	82	116
10	12.4		1,522	785	425	72	86	60	12.11	4	1,436	745	400	76	82
11	12.10		1,522	811	420	73	94	61	12.11	4	1,396	725	375	70	71
12	12.7	6	1,447	758	392	66	72	62	12.8	8	1,353	690	360	69	68
14	12.10		1,462	780	400	66	78	63	12.10	8	1,531	810	410	77	96
15	12.7	6	1,382	730	380	70	77	64	12.8	7	1,470	815	425	80	135
17	12.0	6	1,462	754	395	70	84	65	12.4	7	1,385	710	390	71	70
18	12.5	6	1,335	725	376	69	74	66	12.8	7	1,425	735	400	70	66
20	12.11	4	1,343	688	380	68	70	68	12.4	6	1,404	770	370	69	67
22	12.6	6	1,305	687	365	67	63	69	12.10	5	1,416	745	380	75	77
23	12.9	5	1,348	711	378	70	70	72	12.1	5	1,416	740	380	71	74
24	12.7	5	1,390	750	390	68	76	73	12.8	5	1,401	760	380	73	76
25	12.5	5	1,346	732	335	68	76	74	12.5	5	1,420	765	415	73	101
26	12.1	3	1,433	734	380	68	71	77	12.0	4	1,384	735	380	71	73
27	12.8	3	1,477	780	415	75	103	78	12.9	5	1,424	755	390	71	75
28	12.8		1,500	780	410	75	86	80	12.6	7	1,437	755	380	72	78
29	12.3	5	1,442	790	395	70	80	81	12.7	7	1,419	755	390	72	75
31	12.3	6	1,310	700	355	65	69	82	12.11	7	1,454	775	385	74	85
32	12.7	6	1,428	755	390	72	84	83	12.7	7	1,477	755	400	75	82
33	12.5	6	1,410	750	385	74	74	84	12.10	8	1,475	785	400	82	94
34	12.2	6	1,326	710	355	68	69	85	12.6	7	1,518	780	420	76	98
36	12.11	6	1,492	810	400	76	86	86	12.11	7	1,346	740	390	70	69
37	12.10	8	1,380	720	360	65	63	87	12.7	7	1,330	720	350	73	80
38	12.4	6	1,450	765	390	73	84	89	12.6	5	1,464	760	400	72	76
39	12.6	5	1,422	755	385	65	71	94	12.11	5	1,353	715	360	70	71
43	12.9		1,342	735	370	70	66	96	12.1	5	1,472	775	385	68	78
45	12.1	12	1,332	740	365	69	68	99	12.11	3	1,386	720	400	75	78
49	12.3		1,389	720	370	72	71	102	12.11		1,307	715	360	71	76
50	12.1	7	1,467	760	390	76	81	107	12.8	6	1,416	750	380	72	81
51	12.0		1,452	765	385	71	73	112	12.0	5	1,381	730	380	72	69
52	12.11	5	1,351	710	360	69	70								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
157		117	165			181				68	330
158		109	167			182				68	330
159	1,495	105	148			183				76	400
160	1,475	100	151			184				76	380
161		101	159	71		185				70	470
162		98	144	70		186				77	390
163		98	149	74		187				74	380
164		106	159	71		188				77	400
165		99	148	68		189				66	390
166		100	150	67		190				70	370
167		97	158	73		191				74	400
168		94	145	65		192				70	395
169		107	157	71		193				67	350
170		101	153	69		194				66	335
171		107	164	73		195				63	415
172		106	154	73	380	196				66	380
173		111	181	76	420	197				66	365
174		107	168	71	390	198				70	385
175		102	155	67	378	199				68	375
176				66	365	200				69	385
177				66	365	201				76	400
178				68	340	202				70	385
179				68	375	203				77	400
180				71	400						

13-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	13.0		1	1,479	762	183	149	126		l. br.	br.		
2.	13.3		4	1,452	745	187	138	115		blo.	blo.	2	1
3.	13.3		3	1,454	755	185	137	117		blo.	gr. bl.	2	1
4.	13.11		2	1,471	769	183	148	121	83	l. br.	gr.	1	1
5.	13.6		1	1,413	741	191	146	125	72	br.	bl.	5	1
6.	13.7		1	1,622	829	186	145	128	92	blo.	bl.		1
7.	13.3	8	3	1,472	785	186	145	122	85	br.	br.		3
8.	13.5		4	1,459	756	193	146	117	75	d. br.	d. br.	1	2
9.	13.10	8	2	1,507	758	191	143	123	80	br.	bl.	1	
10.	13.4		3	1,505	752	189	159	135	90	br.	bl.	1	2
11.	13.6	7	3	1,435	753	184	145	126	84	br.	gr.	1	1
12.	13.7		1	1,487	783	193	145	124	88	br.	gr.		
13.	13.8		1	1,521	736	191	154	133	88	blo.	bl.		
14.	13.5		1	1,431	727	190	146	124	72	blo.	bl.		1
15.	13.6		1	1,340	710	181	142	121	72	blo.	bl.		
16.	13.3		2	1,471	760	193	149	126	88	r.	bl.	1	2
17.	13.4		1	1,503	781	178	147	133	101	l. br.	gr.		
18.	13.2		1	1,467	750	180	144	130	90	br.	l. br.		
19.	13.6		2	1,432	777	175	147	121	83	d. br.	gr. br.	2	2
20.	13.2	6	1	1,366	696	187	144	120	69	br.	br.	1	1
21.	13.3	6	1	1,498	792	194	144	125	79	br.	gr.	1	1
22.	13.3		2	1,410	720	180	138	114	69	br.	gr.		1
23.	13.5	6	1	1,578	825	187	150	131	135	br.	br.		
24.	13.5	6	1	1,311	732	180	146	121	65	br.	br.	2	
25.	13.2		2	1,540	789	192	150	122	91	l. br.	gr.		3
26.	13.9	5	1	1,568	806	186	140	120	98	d. br.	bl. gr.	1	1
27.	13.4		5	1,547	806	185	147	127	123	br.	bl. gr.	2	2
28.	13.3		5	1,400	762	185	148	125	79	d. br.	d. br.	2	2
29.	13.11		9	1,610	844	192	144	121	105	blo.	bl.	3	2
30.	13.2		1	1,531	769	191	144	121	91	br.	bl.	1	2
31.	13.8		3	1,522	812	185	153	129	91	bla.	gr.	2	2
32.	13.3		8	1,474	751	186	150	126	85	br.	bl.	2	1
33.	13.11		1	1,430	744	181	144	129	89	br.	br.	1	
34.	13.8		2	1,556	799	195	150	131	92	br.	br.	3	2
35.	13.2		8	1,406	742	181	141	124	75	br.	bl.		
36.	13.8		6	1,342	685	175	138	113	62	br.	bl.	3	
37.	13.11		6	1,529	784	179	147	121	75	l. br.	br.		
38.	13.0		2	1,375	735	178	142	117	71	l. br.	bl.		2
39.	13.9		6	1,492	788	182	149	121	90	d. br.	l. br.	(?)	
40.	13.1		3	1,457	784	192	147	120	78	bla.	gr.	2	1
41.	13.9		6	1,551	787	187	153	129	100	blo.	bl.	1	1
42.	13.8		4	1,475	752	177	143	122	90	blo.	gr.	1	
43.	13.2		6	1,460	767	186	150	122	79	br.	gr. br.	1	
44.	13.10		5	1,634	847	190	156	130	106	br.	gr.	1	1
45.	13.2		7	1,553	802	186	147	126	104	blo.	gr. bl.	1	1
46.	13.2		7	1,501	773	186	155	125	83	br.	br.	3	2
47.	13.9		7	1,394	729	190	150	127	76	br.	bl.	1	4
48.	13.3		7	1,505	752	186	145	130	83	d. blo.	bl.		1
49.	13.9		7	1,377	739	171	146	120	69	blo.	gr. bl.	1	6
50.	13.9		7	1,466	772	179	149	122	79	d. blo.	gr. bl.	1	
51.	13.5		7	1,555	808	195	147	118	98	r. bl.	gr.	2	
52.	13.5		5	1,501	751	174	147	125	74	l. br.	bl.		1
53.	13.0		8	1,586	869	182	149	132	115	d. br.	br.	3	3
54.	13.3		8	1,403	782	192	149	127	92	br.	br.		
55.	13.7		2	1,515	779	189	146	124	99	br.	bl.	2	1
56.	13.10		8	1,515	787	189	151	121	93	br.	gr.		2
57.	13.4		7	1,416	751	188	136	121	77	br.	bl.		
58.	13.4		7	1,485	786	189	146	125	99	br.	br.		1
59.	13.6		7	1,424	731	186	142	119	76	blo.	bl.	3	3
60.	13.8		7	1,535	789	188	146	124	98	br.	bl.	2	1
61.	13.2		6	1,385	724	180	142	124	76	blo.	bl.	3	2
62.	13.1		6	1,420	696	191	152	127	75	br.	bl.	1	1
63.	13.7		6	1,410	733	176	147	123	79	d. br.	gr. bl.	5	2
64.	13.10		6	1,530	802	189	147	116	95	br.	bl.	2	3
65.	13.1		5	1,500	767	182	148	126	86	br.	bl.	1	5
66.	13.5		5	1,356	732	178	148	125	69	d. br.	bl.		2
67.	13.6		5	1,514	805	185	159	137	144	d. br.	br.	3	1
68.	13.3		4	1,388	735	181	146	123	69	d. blo.	bl.	1	
69.	13.5		4	1,366	726	180	148	122	67	d. br.	bl.	5	5
70.	13.9		8	1,443	736	177	155	124	71	br.	gr.	3	1
71.	13.3		4	1,446	759	183	155	133	78	br.	bl.	4	3
72.	13.6		3	1,541	790	183	147	121	91	d. blo.	bl.	2	2
73.	13.3		8	1,437	716	188	156	123	76	r. bl.	bl.	2	7
74.	13.1		7	1,530	782	191	140	121	78	br.	l. br.		1
75.	13.5		7	1,493	763	197	142	122	81	br.	gr. br.		
76.	13.1		10	1,405	750	191	149	125	82	blo.	gr. bl.	7	3
77.	13.8		7	1,510	795	184	147	122	93	br.	bl.	1	
78.	13.0		6	1,374	728	182	145	122	62	br.	bl.	1	
79.	13.9		6	1,422	757	180	149	129	83	br.	bl.	6	2

13-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
80	13.7	5	8	1,490	778	185	149	123	87	d. br.	d. br.	2	5
81	13.1	4	3	1,482	773	182	146	123	78	br.	br.	3	5
82	13.0	3	2	1,373	705	182	147	127	68	br.	gr.	3	5
83	13.8	2	2	1,519	763	177	142	128	82	d. br.	bl. gr.	1	5
84	13.11	1	1	1,641	853	178	149	131	110	br.	gr.	1	2
85	13.7	7	7	1,380	751	190	150	124	75	br.	bl.	1	2
86	13.11	2	2	1,562	787	184	145	124	98	br.	gr. bl.	1	1
87	13.10	7	7	1,460	770	186	147	133	80	d. br.	bl.	1	1
88	13.9	3	3	1,557	790	179	144	132	95	br.	bl.	1	3
89	13.6	6	6	1,436	746	168	152	127	86	bla.	d. br.	1	3
90	13.8	4	4	1,585	801	186	146	132	101	br.	bl.	1	3
91	13.10	6	6	1,442	771	183	151	121	84	blo.	gr. bl.	2	1
92	13.2	6	6	1,554	780	185	146	131	131	br.	br.	1	1
93	13.7	1	1	1,606	818	183	141	119	114	d. br.	l. br.	1	3
94	13.4	9	1	1,470	790	183	137	118	78	br.	bl.	1	5
95	13.11	2	2	1,526	790	192	149	126	96	br.	bl.	1	2
96	13.5	9	9	1,484	753	194	147	121	83	d. blo.	bl.	4	2
97	13.10	9	9	1,443	774	183	146	124	79	blo.	bl.	1	2
98	13.10	7	7	1,498	772	198	140	123	85	d. br.	br.	1	5
99	13.9	8	8	1,470	784	183	146	125	91	l. br.	bl.	1	1
100	13.10	1	3	1,496	763	187	141	126	81	blo.	bl.	1	4
101	13.4	6	6	1,458	775	191	148	130	94	br.	br.	2	1
102	13.11	8	8	1,438	720	186	142	117	76	blo.	bl.	3	3
103	13.10	5	5	1,569	803	197	148	121	103	blo.	bl.	1	3
104	13.5	9	9	1,385	760	180	145	125	70	d. br.	d. br.	6	2
105	13.8	6	6	1,412	750	182	150	127	84	br.	gr. bl.	2	3
106	13.11	6	6	1,426	719	185	145	124	64	br.	gr.	1	1
107	13.1	2	2	1,443	771	183	149	123	76	d. br.	bl.	5	1
108	13.0	1	1	1,323	724	174	137	118	63	br.	bl. gr.	3	3
109	13.1	5	6	1,383	753	175	145	123	88	br.	br.	6	1
110	13.6	5	3	1,366	721	179	133	116	80	d. br.	d. br.	4	6
111	13.5	8	1	1,485	768	184	144	127	80	br.	gr.	1	1
112	13.5	5	1	1,431	738	191	142	122	72	br.	gr. bl.	1	2
113	13.9	8	5	1,430	742	197	139	121	77	br.	gr.	4	2
114	13.6	7	2	1,400	733	188	143	121	73	l. br.	br.	3	1
115	13.3	8	2	1,554	775	184	156	134	93	blo.	bl.	2	1
116	13.6	3	3	1,528	798	195	155	136	100	blo.	bl. gr.	2	2
117	13.4	7	1	1,476	734	176	136	124	74	blo.	bl.	1	2
118	13.5	5	5	1,528	783	181	154	126	99	blo.	gr. bl.	1	3
119	13.2	2	2	1,450	751	182	151	121	82	blo.	bl.	1	1
120	13.3	1	1	1,494	776	192	156	123	88	br.	br.	1	1
121	13.3	7	7	1,584	785	191	155	131	95	br.	bl.	1	1
122	13.2	6	3	1,433	757	181	140	116	73	br.	br.	4	1
123	13.0	1	1	1,405	734	180	148	125	81	d. blo.	bl.	1	1
124	13.3	6	2	1,483	727	185	153	127	83	r.	gr.	1	2
125	13.5	5	3	1,353	696	177	142	115	64	blo.	bl.	1	1
126	13.9	4	1	1,382	724	177	139	115	69	br.	gr.	2	1
127	13.5	5	5	1,532	804	193	148	128	105	d. br.	d. br.	1	3
128	13.7	4	4	1,560	814	203	154	125	118	br.	bl.	1	3
129	13.8	1	1	1,546	799	174	150	124	85	d. blo.	gr.	1	1
130	13.11	10	1	1,614	800	183	154	139	106	br.	br.	1	2
131	13.11	1	1	1,544	808	188	152	124	98	d. br.	gr.	1	2
132	13.6	2	2	1,514	780	184	157	132	85	d. br.	gr. br.	3	3
133	13.5	1	1	1,708	905	191	148	135	135	d. br.	gr.	2	2
134	13.11	9	3	1,713	905	195	150	128	128	d. br.	bl.	1	2
135	13.3	9	6	1,509	791	191	149	121	121	br.	bl.	3	3
136	13.8	9	1	1,606	814	193	144	127	127	blo.	g. bl.	1	1
137	13.8	9	1	1,605	814	196	153	129	129	d. br.	d. br.	1	2
138	13.1	8	3	1,543	781	184	143	117	117	l. br.	bl.	2	2
139	13.0	8	2	1,435	728	181	159	126	126	d. br.	bl.	1	1
140	13.7	8	1	1,496	786	186	148	129	129	d. blo.	l. br.	1	1
141	13.5	8	6	1,403	720	190	142	120	120	r. br.	l. br.	1	4
142	13.8	2	2	1,574	798	198	149	122	122	d. br.	bl.	2	2
143	13.6	7	2	1,461	754	184	146	123	123	d. blo.	bl.	2	3
144	13.8	3	3	1,463	754	184	153	126	126	d. blo.	bl. gr.	5	3
145	13.1	2	2	1,477	772	178	150	126	126	d. br.	gr.	1	1
146	13.6	6	2	1,580	783	183	149	134	134	d. br.	gr.	1	1
147	13.3	5	1	1,483	776	176	144	125	125	d. br.	d. br.	1	1
148	13.0	4	13	1,351	727	187	149	128	128	d. br.	bl.	7	3
149	13.6	4	3	1,632	814	184	145	122	122	bla.	d. br.	3	3
150	13.3	4	8	1,418	720	180	154	135	135	br.	bl.	2	5
151	13.5	7	6	1,445	766	196	142	128	128	d. br.	gr.	3	4
152	13.3	5	2	1,417	730	180	150	132	132	blo.	bl.	5	1
153	13.8	2	2	1,462	771	191	145	122	122	d. br.	gr.	2	3
154	13.11	7	1	1,544	818	188	145	126	126	d. br.	gr.	3	3
155	13.7	3	4	1,368	722	182	139	122	122	d. blo.	bl.	2	2
156	13.3	5	5	1,431	722	190	141	125	125	d. br.	gr.	1	3
157	13.11	5	4	1,458	784	184	144	124	124	l. br.	gr. br.	1	1
158	13.4	5	8	1,403	722	183	146	132	132	d. blo.	gr.	4	5

13-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
159.....	13.9	5	6	1,384	.....	194	145	122	.....	d. blo.	bl.	3	2
160.....	13.11	5	2	1,458	.....	173	145	118	.....	d. br.	bl.	1	1
161.....	13.7	5	2	1,460	.....	182	140	120	.....	l. br.	bl.	1	1
162.....	13.2	5	2	1,374	715	180	143	121	.....	d. br.	bl.	1	1
163.....	13.2	5	2	1,414	722	187	155	132	.....	d. br.	l. br.	1	1
164.....	13.0	5	3	1,415	737	170	144	126	.....	d. br.	bl.	1	1
165.....	13.6	5	3	1,451	752	182	147	121	.....	l. br.	bl.	1	1
166.....	13.6	5	3	1,470	768	181	146	123	.....	d. br.	l. br.	1	1
167.....	13.11	5	1	1,526	744	193	151	130	.....	l. br.	bl.	3	1
168.....	13.11	5	1	1,500	770	193	147	128	81	br.	br.	2	1

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
169.....	13.6	7	1,457	745	397	69	77	173.....	13.7	5	1,288	690	355	63	59
170.....	13.1	7	1,368	735	380	71	65	174.....	13.4	8	1,472	755	395	72	78
171.....	13.5	7	1,681	827	478	87	168	175.....	13.6	6	1,560	790	425	71	83
172.....	13.4	6	1,555	810	448	80	101								

REPEATED MEASUREMENTS.

Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
3.....	13.3	9	1,613	864	470	84	198	61.....	13.11	5	1,552	945	.....	.....	86
4.....	13.10	9	1,590	816	435	77	100	62.....	13.8	9	1,542	800	435	82	105
5.....	13.8	8	1,571	796	432	82	97	63.....	13.4	.....	1,392	710	380	70	69
6.....	13.6	8	1,573	810	448	84	112	64.....	13.10	.....	1,352	685	355	68	63
7.....	13.0	8	1,555	798	426	73	112	67.....	13.11	.....	1,427	745	380	78	79
8.....	13.8	8	1,632	837	.....	.....	106	68.....	13.11	.....	1,606	840	450	84	108
9.....	13.6	8	1,528	791	412	76	84	71.....	13.4	.....	1,449	740	375	68	72
10.....	13.10	8	1,514	782	422	77	112	72.....	13.8	.....	1,465	745	395	74	81
12.....	13.4	8	1,701	915	465	89	131	74.....	13.9	.....	1,450	770	390	72	76
15.....	13.2	8	1,498	778	402	72	91	75.....	13.7	.....	1,452	740	410	76	82
16.....	13.10	8	1,468	767	405	76	89	76.....	13.4	.....	1,525	810	400	73	79
17.....	13.11	8	1,576	790	435	75	92	77.....	13.11	.....	1,564	830	420	75	97
19.....	13.5	8	1,377	745	360	72	66	78.....	13.6	6	1,416	765	400	75	81
20.....	13.5	8	1,423	858	376	68	82	79.....	13.6	6	1,476	745	395	72	75
21.....	13.3	8	1,373	713	374	66	61	80.....	13.4	5	1,515	790	420	71	80
22.....	13.5	8	1,512	820	415	73	126	87.....	13.4	8	1,502	785	385	77	89
23.....	13.1	7	1,452	753	401	74	81	89.....	13.2	8	1,445	765	390	73	82
24.....	13.6	6	1,417	750	384	70	76	90.....	13.4	8	1,432	750	380	71	71
25.....	13.7	6	1,413	745	390	67	75	91.....	13.2	8	1,498	775	410	75	88
26.....	13.6	6	1,294	690	350	68	61	94.....	13.10	8	1,451	740	390	66	74
27.....	13.10	8	1,372	710	355	69	73	95.....	13.4	5	1,421	765	400	72	83
28.....	13.7	5	1,450	735	380	71	76	97.....	13.11	8	1,494	785	415	81	102
29.....	13.8	6	1,402	730	390	64	78	99.....	13.0	6	1,480	770	380	68	76
31.....	13.2	5	1,507	780	415	78	96	100.....	13.5	8	1,407	750	380	74	82
38.....	13.2	5	1,566	800	420	74	100	102.....	13.5	.....	1,519	800	410	77	90
39.....	13.3	7	1,562	806	431	78	92	104.....	13.8	8	1,496	795	405	79	85
41.....	13.0	7	1,572	860	420	80	108	107.....	13.9	6	1,519	810	420	80	101
44.....	13.2	7	1,561	805	425	74	89	109.....	13.8	9	1,433	760	380	75	86
45.....	13.1	7	1,405	735	380	67	68	112.....	13.6	6	1,462	775	390	74	78
46.....	13.10	7	1,561	825	425	80	100	113.....	13.3	6	1,452	770	390	73	72
47.....	13.2	6	1,502	795	400	74	86	114.....	13.10	6	1,472	770	395	69	73
48.....	13.8	6	1,559	840	405	76	102	115.....	13.7	6	1,466	760	390	73	84
49.....	13.9	6	1,547	770	425	77	86	117.....	13.2	6	1,400	740	380	71	77
51.....	13.5	8	1,452	750	490	67	71	120.....	13.10	9	1,500	775	405	75	86
52.....	13.8	8	1,494	815	410	75	102	122.....	13.10	9	1,685	895	445	85	140
53.....	13.11	8	1,516	810	415	77	95	123.....	13.11	9	1,481	770	400	75	85
54.....	13.6	8	1,516	770	420	76	80	128.....	13.8	9	1,432	745	370	68	71
56.....	13.1	5	1,450	765	390	70	77	142.....	13.3	5	1,448	780	370	75	85
58.....	13.8	6	1,506	825	405	81	93	144.....	13.2	4	1,383	750	360	68	74

13-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
127	1,576	103	.....	.....	.....	159	.....	101	167	71	.....
128	1,553	109	.....	.....	.....	160	.....	104	167	71	.....
129	1,594	102	.....	.....	.....	161	.....	93	159	73	.....
130	1,679	111	.....	.....	.....	162	.....	97	158	70	.....
131	1,559	104	.....	.....	.....	163	.....	100	155	67	.....
132	1,505	109	.....	.....	.....	164	.....	99	147	69	.....
133	1,710	119	.....	.....	.....	165	1,466	95	159	75	.....
148	.....	109	174	.....	.....	166	1,523	103	164	73	.....
149	.....	113	190	.....	.....	167	.....	100	157	69	.....
150	.....	104	162	.....	.....	169	.....	.....	.....	73	397
151	.....	105	162	.....	.....	170	.....	.....	.....	71	380
153	.....	108	162	.....	.....	171	.....	.....	.....	87	478
154	.....	111	161	.....	.....	172	.....	.....	.....	80	448
155	.....	95	156	.....	.....	173	.....	.....	.....	63	355
156	.....	107	162	.....	.....	174	.....	.....	.....	72	395
157	.....	105	164	.....	.....	175	.....	.....	.....	71	425
158	.....	107	160	.....	.....				

14-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	14.2	.....	2	1,511	780	185	154	122	.....	blo.	bl.	.....	1
2	14.0	.....	4	1,533	801	182	148	126	.....	blo.	g. bl.	1	1
3	14.3	9	1	1,460	783	188	144	124	90	br.	br.	2	3
4	14.9	.....	1	1,411	743	185	144	117	75	d. br.	br.	1	2
5	14.5	.....	1	1,584	803	187	144	121	94	l. br.	bl.	3	1
6	14.3	.....	3	1,539	791	192	140	120	97	blo.	bl.	1	.....
7	14.6	.....	1	1,561	795	189	144	121	85	blo.	bl.	1	1
8	14.11	.....	1	1,470	752	182	145	122	80	br.	g. br.	1	.....
9	14.3	.....	3	1,537	770	175	145	130	83	l. br.	bl.	2	2
10	14.8	.....	5	1,515	770	188	151	130	95	d. br.	g. r.	1	3
11	14.3	.....	1	1,587	820	193	148	126	110	l. br.	g. g. br.	1	1
12	14.9	8	2	1,601	794	188	149	130	114	br.	g. g. br.	1	1
13	14.1	.....	2	1,520	785	194	155	132	98	br.	g. g. br.	5	2
14	14.8	.....	1	1,506	769	185	149	133	91	bla.	g. bl.	1	.....
15	14.7	.....	2	1,385	733	177	148	125	75	l. br.	bl.	1	.....
16	14.3	8	2	1,570	797	191	148	131	111	d. br.	l. r.	.....	8
17	14.4	.....	2	1,412	752	183	158	132	91	l. br.	bl.	2	.....
18	14.5	.....	2	1,413	718	175	139	117	74	br.	gr.	.....	3
19	14.10	6	2	1,516	778	191	151	121	92	d. br.	br.	.....	2
20	14.11	6	2	1,473	730	187	141	121	87	bla.	br.	1	.....
21	14.5	6	1	1,680	900	195	150	132	130	l. br.	gr.	.....	1
22	14.10	8	1	1,700	869	189	145	133	112	d. br.	g. br.	1	.....
23	14.8	9	2	1,622	844	195	146	129	.....	.....	.....	2	.....
24	14.2	9	1	1,610	833	187	143	136	.....	.....	.....	1	.....
25	14.2	9	1	1,536	807	187	145	123	85	.....	.....	1	4
26	14.6	9	3	1,559	820	187	145	128	88	bla.	gr.	.....	2
27	14.0	8	3	1,454	770	188	153	125	83	bla.	gr.	1	2
28	14.10	8	2	1,705	891	190	140	130	131	br.	gr.	1	.....
29	14.8	8	2	1,676	882	209	162	145	135	bla.	gr.	1	.....
30	14.11	8	1	1,593	829	183	148	130	100	bla.	g. br.	3	2
31	14.9	8	4	1,520	799	184	145	126	81	l. br.	bl.	2	3
32	14.7	7	2	1,510	767	190	146	123	95	blo.	bl.	4	.....
33	14.3	7	3	1,451	746	187	142	122	80	rd.	gr.	.....	2
34	14.7	9	3	1,650	877	191	149	130	113	d. br.	br.	1	2
35	14.1	9	1	1,623	820	194	148	133	105	l. br.	gr.	.....	.....
36	14.3	9	1	1,569	814	184	149	124	96	br.	bl.	.....	.....
37	14.4	9	2	1,576	833	192	147	124	98	br.	br.	.....	1
38	14.10	9	1	1,560	833	186	152	130	104	d. br.	bl.	.....	.....
39	14.9	9	2	1,597	825	190	150	130	101	blo.	gr.	.....	1
40	14.0	8	1	1,339	759	190	146	124	75	rd. br.	br.	.....	.....
41	14.9	8	9	1,615	841	202	151	137	126	bla.	d. br.	6	4
42	14.1	8	3	1,522	791	186	149	126	94	bla.	l. br.	2	1
43	14.9	8	4	1,423	752	188	149	121	78	d. blo.	bl.	4	2

14-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
44.	14.3	8	3	1,523	773	177	145	131	86	d. br.	d. br.	3	3
45.	14.2	8	2	1,626	851	166	147	128	119	rd.	gr.	1	1
46.	14.0	8	1	1,630	815	186	149	124	110	br.	l. br.	---	---
47.	14.0	7	4	1,575	814	189	154	133	109	d. br.	gr.	---	3
48.	14.7	7	2	1,581	812	183	135	119	93	d. br.	bl.	1	2
49.	14.5	7	1	1,568	824	193	143	120	104	l. br.	gr.	---	---
50.	14.3	6	2	1,558	804	185	151	112	107	br.	br.	2	3
51.	14.10	6	1	1,620	854	188	147	115	110	d. blo.	bl.	3	---
52.	14.11	5	5	1,538	780	171	141	118	85	d. br.	gr.	---	4
53.	14.8	6	5	1,705	890	187	150	123	139	br.	bl.	1	---
54.	14.6	5	7	1,420	765	185	145	120	78	blo.	bl.	2	4
55.	14.4	5	2	1,529	806	192	148	129	151	d. br.	br.	1	2
56.	14.7	5	2	1,530	787	185	150	127	82	d. br.	bl.	4	5
57.	14.5	8	2	1,616	852	189	156	128	113	l. br.	bl.	1	1
58.	14.9	8	1	1,606	814	188	155	122	102	d. br.	bl.	2	---
59.	14.6	8	5	1,558	823	181	146	131	99	br.	br.	3	1
60.	14.3	7	7	1,655	877	192	151	132	124	rd.	bl.	---	1
61.	14.8	6	6	1,545	821	175	157	125	94	br.	gr.	3	2
62.	14.3	6	5	1,492	795	182	149	119	86	l. br.	bl.	5	4
63.	14.3	4	8	---	---	181	144	126	---	d. br.	d. br.	5	5
64.	14.9	8	2	1,685	898	189	150	129	122	d. br.	bl.	1	1
65.	14.5	7	1	1,450	764	179	142	120	82	bla.	d. br.	1	2
66.	14.8	7	4	1,553	802	181	147	123	94	br.	br.	2	2
67.	14.2	7	3	1,492	757	177	144	127	84	d. br.	d. br.	1	1
68.	14.6	7	2	1,534	792	193	142	124	102	br.	bl.	---	---
69.	14.0	9	6	1,497	796	186	144	124	91	d. blo.	bl.	2	3
70.	14.0	9	1	1,683	881	189	153	127	117	br.	bl.	1	---
71.	14.9	9	3	1,648	833	187	151	129	112	l. br.	bl.	3	3
72.	14.10	9	3	1,610	792	191	143	125	93	blo.	gr.	---	---
73.	14.3	9	9	1,568	807	189	146	122	97	d. br.	bl.	1	1
74.	14.3	9	2	1,609	827	182	138	118	98	l. blo.	bl.	1	---
75.	14.9	9	2	1,592	821	190	143	121	118	d. br.	g. br.	1	2
76.	14.3	9	4	1,555	787	188	148	124	85	blo.	g. bl.	2	3
77.	14.1	9	1	1,374	732	176	141	124	72	bla.	br.	3	2
78.	14.5	9	3	1,581	815	189	148	129	114	d. br.	br.	3	---
79.	14.11	8	4	1,403	735	196	141	125	75	br.	br.	1	---
80.	14.0	8	2	1,565	810	185	148	126	84	br.	g. br.	2	1
81.	14.0	8	1	1,485	765	191	146	129	100	l. br.	bl.	---	---
82.	14.0	8	2	1,508	774	180	145	130	84	rd. br.	bl.	---	1
83.	14.7	6	4	1,504	792	188	143	131	98	d. br.	d. br.	1	3
84.	14.6	6	3	1,480	794	189	142	116	91	br.	br.	2	1
85.	14.5	6	1	1,481	760	184	148	124	80	br.	bl.	---	---
86.	14.0	5	1	1,390	715	176	140	122	68	d. br.	d. br.	5	---
87.	14.10	8	4	1,714	871	199	149	131	133	blo.	bl.	2	2
88.	14.9	8	1	1,579	836	191	148	129	106	d. blo.	gr.	1	1
89.	14.9	8	2	1,636	834	185	141	123	104	blo.	bl.	---	---
90.	14.5	7	1	1,604	823	192	149	130	111	blo.	l. br.	3	---
91.	14.5	7	3	1,403	730	181	154	125	84	br.	bl.	1	2
92.	14.1	7	2	1,331	682	180	138	116	66	br.	br.	---	1
93.	14.9	---	3	1,601	816	197	149	130	---	br.	gr.	---	---
94.	14.3	---	1	1,612	814	196	151	132	125	d. br.	bl.	---	1
95.	14.11	---	1	1,653	842	184	133	108	108	d. br.	d. br.	1	1
96.	14.0	H. S.	3	1,516	784	190	152	127	91	d. br.	g. bl.	1	2
97.	14.9	H. S.	1	1,660	872	193	144	129	120	br.	gr.	3	2
98.	14.4	H. S.	1	1,490	711	177	142	122	82	d. br.	d. br.	1	---
99.	14.10	H. S.	2	1,593	807	192	148	125	115	rd.	d. br.	1	---
100.	14.3	---	1	1,575	824	186	151	123	116	br.	bl.	---	---
101.	14.1	---	1	1,524	776	194	149	123	91	br.	bl.	4	2
102.	14.11	H. S.	3	1,601	826	195	142	122	114	br.	bl.	4	0
103.	14.4	H. S.	a 1	1,672	852	183	142	122	122	d. br.	d. br.	---	2
104.	14.4	H. S.	4	1,450	752	178	150	126	80	d. br.	d. br.	6	1
105.	14.8	H. S.	1	1,716	907	190	152	129	133	br.	g. bl.	1	---
106.	14.8	H. S.	6	1,543	824	186	144	125	105	br.	bl.	2	3
107.	14.5	H. S.	5	1,541	789	200	141	124	96	d. br.	d. br.	2	3
108.	14.6	H. S.	2	1,518	813	186	146	126	93	blo.	gr.	---	2
109.	14.8	H. S.	7	1,494	812	201	154	130	105	br.	bl.	5	1
110.	14.9	H. S.	1	1,437	772	176	142	125	83	bla.	br.	4	2
111.	14.0	9	4	1,522	793	184	139	119	86	br.	bl.	---	2
112.	14.11	H. S.	2	1,668	849	184	143	121	114	l. br.	bl.	1	---
113.	14.0	H. S.	2	1,610	827	184	150	127	101	br.	bl.	b 2	c 2
114.	14.10	H. S.	1	1,684	842	195	150	136	117	br.	gr.	---	---
115.	14.3	H. S.	4	1,446	744	185	149	133	87	d. br.	d. br.	6	1
116.	14.8	H. S.	1	1,337	677	178	153	120	64	d. br.	g. bl.	3	---
117.	14.2	H. S.	4	1,599	815	196	147	132	115	d. br.	d. br.	1	2

a Twin.

b Half brother.

c Half sister.

14-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
118.....	14.9	H. S.	1	1,466	768	188	148	124	104	d. br.	bl.	---	2
119.....	14.11	H. S.	2	1,629	838	188	150	135	103	br.	g. bl.	1	---
120.....	14.7	H. S.	3	1,441	758	183	148	125	86	d. br.	g. br.	2	3
121.....	14.6	H. S.	1	1,550	805	187	144	127	102	br.	bl.	4	---
122.....	14.10	H. S.	6	1,440	770	190	146	123	86	br.	gr.	6	3
123.....	14.3	H. S.	4	1,533	798	181	145	130	102	d. br.	d. br.	3	2
124.....	14.10	H. S.	3	1,545	807	193	151	132	103	d. br.	g. bl.	3	1
125.....	14.11	H. S.	1	1,608	832	199	149	127	108	d. br.	g. bl.	1	2
126.....	14.3	9	3	1,601	860	180	150	130	---	l. br.	bl.	4	1
127.....	14.2	9	5	1,630	850	188	141	131	---	d. br.	d. br.	1	4
128.....	14.1	9	3	1,530	800	179	144	130	---	d. br.	g. br.	1	1
129.....	14.7	9	4	1,614	870	197	151	132	---	d. blo.	g. bl.	4	---
130.....	14.3	9	3	1,660	860	190	153	131	---	d. blo.	gr. bl.	4	4
131.....	14.11	9	4	1,545	810	182	141	122	---	d. br.	bl.	1	1
132.....	14.5	9	3	1,492	820	191	146	129	---	d. br.	l. br.	2	4
133.....	14.9	9	1	1,622	850	194	144	124	---	d. br.	gr.	2	---
134.....	14.3	9	1	1,558	830	201	149	131	---	d. br.	l. br.	---	---
135.....	14.5	9	1	1,409	740	187	153	129	78	d. blo.	g. bl.	2	2
136.....	14.1	9	1	1,472	740	192	156	126	---	d. blo.	l. br.	1	4
137.....	14.7	9	3	1,445	780	192	152	122	71	d. br.	bl.	1	2
138.....	14.9	9	1	1,485	800	192	151	96	---	d. blo.	g. bl.	---	---
139.....	14.1	9	2	1,706	910	182	146	137	---	d. br.	bl.	1	---
140.....	14.10	9	4	1,462	780	179	142	122	---	d. br.	d. br.	2	2
141.....	14.1	9	2	1,572	840	183	141	127	---	d. br.	gr.	1	1
142.....	14.5	9	1	1,554	810	175	136	122	---	d. br.	gr.	1	5
143.....	14.0	9	3	1,562	840	180	141	128	90	d. br.	bl.	1	---
144.....	14.9	9	3	1,575	850	194	147	135	---	d. br.	g. bl.	4	---
145.....	14.5	9	1	1,419	720	177	144	123	76	d. blo.	bl.	4	2
146.....	14.0	9	1	1,502	820	185	143	129	---	d. br.	gr.	---	---
147.....	14.3	9	1	1,524	782	178	141	127	---	d. blo.	gr.	---	---
148.....	14.3	9	1	1,531	824	171	150	131	90	d. blo.	gr.	---	---
149.....	14.0	9	6	1,494	790	190	153	128	---	rd. br.	---	1	7
150.....	14.6	9	1	1,546	753	190	143	124	---	d. br.	d. br.	2	3
151.....	14.3	9	6	1,566	810	187	158	136	80	d. br.	l. br.	2	4
152.....	14.7	9	6	1,566	830	190	150	125	96	d. br.	gr.	4	3
153.....	14.11	9	2	1,551	799	180	146	126	---	d. br.	bl.	1	2
157.....	14.8	9	2	1,545	840	197	150	123	---	d. br.	g. br.	1	1
161.....	14.2	9	6	1,596	840	197	152	122	117	d. br.	gr.	---	---
169.....	14.2	9	6	1,478	890	181	142	---	80	l. br.	bl.	1	4

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
153.....	14.0	5	1,545	790	420	76	104	163.....	14.5	9	1,672	865	478	80	121
154.....	14.6	9	1,597	845	460	85	115	164.....	14.5	7	1,456	760	395	69	102
155.....	14.6	---	1,726	860	490	82	119	165.....	14.11	7	1,610	825	440	79	116
156.....	14.11	---	1,625	840	450	84	122	166.....	14.4	5	1,518	788	427	79	94
158.....	14.0	6	1,401	745	380	70	78	167.....	14.7	9	1,647	853	452	83	124
159.....	14.2	8	1,605	861	440	83	103	168.....	14.0	7	1,411	720	405	75	82
160.....	14.10	9	1,581	795	413	78	82	170.....	14.11	9	1,577	815	450	80	94
162.....	14.7	6	1,395	725	370	64	72								

14-year-old boys. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
5	14.10	9	1,530	805	423	81	87	58	14.4	---	1,555	820	415	76	108
7	14.3	9	1,537	812	400	75	100	59	14.6	---	1,497	775	400	75	94
10	14.4	8	1,581	816	450	83	112	60	14.9	8	1,619	845	445	82	104
11	14.6	8	1,523	803	435	83	97	61	14.4	7	1,495	795	410	74	112
12	14.8	8	1,580	835	443	84	103	62	14.2	7	1,485	740	410	76	81
13	14.8	8	1,610	810	440	78	100	63	14.7	7	1,432	755	390	75	85
16	14.3	7	1,563	822	446	81	105	64	14.11	7	1,616	855	430	81	111
18	14.2	8	1,539	795	434	78	108	74	14.1	8	1,644	845	440	80	96
21	14.3	8	1,570	820	425	77	91	75	14.4	8	1,575	795	450	81	97
22	14.2	7	1,470	750	403	70	77	77	14.9	8	1,583	840	455	82	111
27	14.4	6	1,625	850	435	74	123	78	14.0	9	1,411	745	365	76	66
28	14.4	6	1,485	805	400	62	92	79	14.9	7	1,523	810	410	76	102
30	14.2	9	1,642	830	455	94	94	83	14.8	9	1,632	820	435	85	104
31	14.9	9	1,643	885	430	81	112	84	14.11	8	1,720	900	460	91	124
32	14.4	9	1,559	795	455	85	98	86	14.11	8	1,612	840	460	81	110
33	14.11	9	1,517	795	405	75	98	87	14.10	8	1,548	820	425	78	99
35	14.2	9	1,437	755	410	75	81	88	14.5	7	1,670	845	450	86	118
36	14.9	6	1,391	720	380	68	69	89	14.10	7	1,532	800	450	79	107
40	14.2	7	1,494	810	415	71	82	91	14.9	8	1,495	805	390	74	91
41	14.10	7	1,635	830	475	84	116	92	14.3	8	1,604	835	440	83	151
44	14.11	6	1,725	910	470	87	130	95	14.10	7	1,573	860	425	81	102
45	14.4	8	1,643	790	450	87	123	101	14.7	7	1,507	795	410	79	99
46	14.5	8	1,609	845	440	80	102	102	14.11	9	1,512	780	410	72	84
47	14.9	8	1,458	760	395	75	91	107	14.2	5	1,496	800	400	76	86
48	14.4	8	1,583	805	440	78	96	108	14.0	9	1,388	745	370	69	71
49	14.10	8	1,422	770	385	75	77	111	14.5	9	1,536	810	425	75	88
51	14.5	8	1,631	861	436	87	111	112	14.6	9	1,522	810	420	75	92
54	14.4	9	1,566	825	435	82	100	113	14.10	9	1,535	810	425	74	93
55	14.7	9	1,610	825	440	75	116	114	14.7	9	1,481	870	395	73	80
57	14.3	---	1,470	770	410	72	82	160	14.10	9	1,549	795	413	78	88

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
1	1,517	98	---	---	---	116	1,396	94	---	---	---
2	1,597	102	---	---	---	117	1,640	99	---	---	---
94	1,646	107	---	---	---	118	1,435	105	---	---	---
95	1,678	110	---	---	---	119	1,630	114	---	---	---
96	1,540	108	---	---	---	120	1,494	103	---	---	---
97	1,711	106	---	---	---	121	1,624	106	---	---	---
98	1,566	98	---	---	---	122	1,465	109	---	---	---
99	1,647	104	---	---	---	123	1,612	117	---	---	---
100	1,633	112	---	---	---	124	1,526	101	---	---	---
101	1,598	110	---	---	---	125	1,654	105	---	---	---
102	1,659	111	---	---	---	126	---	108	---	---	---
103	1,702	110	---	---	---	127	---	105	---	---	---
104	1,475	102	---	---	---	128	---	101	---	---	---
105	1,786	112	---	---	---	129	---	106	---	---	---
106	1,600	104	---	---	---	130	---	97	---	---	---
107	1,626	109	---	---	---	131	---	102	---	---	---
108	1,503	102	---	---	---	132	---	96	---	---	---
109	1,501	111	---	---	---	133	---	111	---	---	---
110	1,526	98	---	---	---	134	---	110	---	---	---
111	1,555	100	---	---	---	135	---	103	---	---	---
112	1,692	114	---	---	---	136	---	103	---	---	---
113	1,603	104	---	---	---	137	---	114	---	---	---
114	1,738	115	---	---	---	138	---	116	---	---	---
115	1,513	102	---	---	---	139	---	119	---	---	---
						140	---	117	---	---	---
						141	---	106	---	---	---
						142	---	101	---	---	---
						143	---	101	---	---	---
						144	---	101	---	---	---
						145	---	97	---	---	---
						146	---	102	---	---	---
						147	---	96	---	---	---
						148	---	111	---	---	---
						149	---	110	---	---	---
						150	---	103	---	---	---
						151	---	103	---	---	---
						152	---	114	---	---	---
						153	---	116	---	---	---
						154	---	119	---	---	---
						155	---	117	---	---	---
						156	---	106	---	---	---
						157	---	103	---	---	---
						158	---	105	---	---	---
						159	---	105	---	---	---
						160	---	105	---	---	---

15-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	15.0	-----	1	1,622	834	185	153	131	-----	br.	l. br.	2	-----
2	15.0	-----	1	1,685	852	190	145	134	-----	blo.	g. bl.	-----	-----
3	15.10	-----	1	1,673	861	183	147	128	-----	d. br.	gr.	-----	-----
4	15.0	-----	6	1,542	773	191	148	132	83	d. br.	l. bl.	3	2
5	15.6	-----	1	1,566	805	185	151	133	112	bla.	br.	-----	2
6	15.3	-----	1	1,555	808	193	153	130	97	blo.	bl.	-----	-----
7	15.11	-----	1	1,421	713	178	135	114	74	d. br.	br.	-----	1
8	15.5	-----	1	1,667	839	184	146	128	123	blo.	g. bl.	1	1
9	15.10	-----	3	1,648	828	193	145	128	111	blo.	g. br.	-----	-----
10	15.0	-----	1	1,631	818	190	150	128	108	l. br.	br.	1	1
11	15.10	-----	1	1,445	757	182	148	130	86	d. br.	d. br.	1	-----
12	15.2	-----	2	1,597	822	182	144	129	108	br.	bl.	-----	2
13	15.9	9	1	1,750	904	181	155	137	140	br.	bl.	1	1
14	15.9	5	5	1,401	752	185	143	126	85	l. br.	gr.	2	2
15	15.7	5	1	1,538	800	186	151	127	93	br.	bl.	2	2
16	15.11	9	2	1,776	914	195	151	127	125	br.	bl.	4	2
17	15.1	7	2	1,485	784	183	150	122	96	d. br.	bl.	-----	1
18	15.9	8	1	1,597	842	181	150	133	109	br.	bl.	-----	1
19	15.9	9	1	1,716	880	205	149	135	147	-----	-----	2	4
20	15.5	9	2	1,715	890	194	157	137	129	-----	-----	2	2
21	15.3	9	-----	-----	-----	-----	-----	-----	135	-----	-----	-----	-----
22	15.7	9	5	1,528	817	180	144	126	96	br.	gr.	3	2
23	15.10	9	2	1,609	838	180	146	126	110	blo.	bl.	1	1
24	15.7	9	1	1,671	848	186	140	124	112	blo.	bl.	2	-----
25	15.2	8	2	1,531	793	190	150	121	90	blo.	bl.	2	1
26	15.6	8	1	1,566	806	181	141	122	101	l. br.	bl.	-----	-----
27	15.6	8	1	1,522	789	182	150	130	93	br.	bl.	-----	-----
28	15.10	8	1	1,643	842	194	161	128	127	blo.	bl.	1	1
29	15.7	8	3	1,634	874	194	150	132	123	d. br.	gr.	3	1
30	15.0	7	1	1,507	754	176	142	123	85	d. blo.	bl.	-----	2
31	15.0	7	2	1,556	808	175	149	123	94	d. blo.	g. bl.	1	1
32	15.1	8	1	1,755	895	195	147	126	137	d. br.	bl.	-----	1
33	15.0	9	2	1,521	775	189	150	133	97	br.	gr.	1	1
34	15.5	9	1	1,694	874	181	147	124	123	br.	bl.	-----	-----
35	15.2	9	1	1,488	756	180	143	120	78	l. br.	gr.	2	1
36	15.2	9	2	1,599	800	186	144	126	100	br.	gr.	1	-----
37	15.0	9	3	-----	-----	-----	189	148	135	blo.	br.	2	-----
38	15.8	9	1	1,701	903	191	151	130	132	br.	bl.	-----	-----
39	15.10	9	3	1,617	841	187	141	121	118	d. br.	bl.	2	1
40	15.9	8	6	1,568	816	192	144	124	108	d. br.	br.	2	3
41	15.11	8	4	1,495	791	193	149	125	90	d. br.	l. br.	1	3
42	15.8	8	3	1,642	848	189	144	127	121	br.	bl.	3	-----
43	15.1	7	2	1,593	832	184	148	130	113	bla.	br.	1	1
44	15.10	7	1	1,598	852	167	144	122	99	d. br.	bl.	4	3
45	15.6	8	1	1,624	834	186	141	119	102	-----	-----	-----	2
46	15.8	8	4	1,626	871	185	151	133	125	br.	gr.	1	3
47	15.0	8	6	1,452	777	183	147	121	81	d. br.	g. br.	-----	-----
48	15.0	8	2	1,566	800	187	158	129	96	d. br.	bl.	1	-----
49	15.9	8	1	1,653	843	182	151	139	115	br.	g. bl.	-----	-----
50	15.10	8	3	1,650	872	190	148	132	119	d. blo.	g. bl.	2	3
51	15.5	8	1	1,722	900	189	148	135	145	l. br.	gr.	-----	-----
52	15.1	7	1	1,591	856	185	147	127	101	l. br.	l. br.	4	-----
53	15.3	7	1	1,739	888	183	146	132	118	br.	bl.	-----	-----
54	15.10	9	2	1,654	844	192	143	120	116	br.	l. br.	-----	1
55	15.0	9	4	1,654	811	185	147	127	96	d. br.	bl.	5	2
56	15.10	9	4	1,536	813	195	144	129	92	br.	bl.	1	2
57	15.6	9	3	1,735	903	191	146	128	144	rd.	g. bl.	1	1
58	15.7	9	1	1,732	923	199	145	125	144	br.	g. bl.	1	-----
59	15.6	9	1	1,646	813	185	139	122	113	d. br.	d. br.	2	-----
60	15.3	9	1	1,658	865	196	145	131	132	d. blo.	bl.	-----	-----
61	15.3	9	1	1,670	895	186	149	129	128	br.	bl.	2	-----
62	15.0	9	3	1,586	819	191	144	126	115	d. br.	br.	2	3
63	15.9	9	2	1,671	872	191	148	131	133	bla.	gr.	1	-----
64	15.8	8	5	1,735	875	195	151	135	124	d. br.	gr.	3	5
65	15.10	8	1	1,611	840	185	145	129	164	d. br.	bl.	3	1
66	15.9	2d yr. ^b	2	1,615	855	191	150	131	-----	blo.	bl.	1	3
67	15.8	-----	2	1,653	845	190	141	126	-----	br.	g. bl.	3	-----
68	15.10	-----	2	1,677	852	188	149	131	-----	d. br.	bl.	2	1
69	15.7	-----	2	1,640	830	191	148	128	-----	br.	gr.	2	-----
70	15.7	-----	2	1,658	832	194	145	126	-----	br.	gr.	2	-----
71	15.6	-----	2	1,724	920	191	148	132	-----	br.	gr.	-----	1
72	15.10	-----	3	1,642	873	201	144	127	-----	d. br.	br.	1	4
73	15.10	-----	3	1,687	756	181	135	122	-----	l. br.	bl.	3	3
74	15.8	-----	1	1,687	884	181	153	133	-----	d. blo.	g. bl.	2	-----
75	15.8	-----	4	1,686	852	202	150	137	-----	br.	br.	2	1
76	15.1	-----	1	1,441	706	185	140	131	-----	d. br.	d. br.	5	-----
77	15.11	Sen.	1	1,738	908	195	154	135	131	d. br.	d. br.	5	-----

^a Of twins.^b H. S. 1st, 2d, 3d yr., Jr., Sen., designate high school pupils.

15-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
78.	15.9		4	1,622	855	194	154	136	123	br.	bl.	1	2
79.	15.4		3	1,700	875	195	156	138	144	br.	br.	1	2
80.	15.9		1	1,704	870	190	156	140	118	br.	bl.		
81.	15.10		5	1,677	879	191	147	131	132	br.	bl.	4	2
82.	15.9	3d yr.	1	1,670	861	186	153	133	131	d. br.	g. bl.	1	2
83.	15.3	3d yr.	2	1,626	869	192	140	123	103	br.	br.	3	2
84.	15.10		7	1,674	883	176	159	134	116	br.	bl.	4	4
85.	15.7		2	1,522	795	175	143	123	94	d. br.	gr. br.	2	2
86.	15.10		1	1,570	814	181	146	130	105	d. br.	gr.		
87.	15.7	2d yr.	3	1,460	762	187	146	127	84	l. br.	g. bl.	3	1
88.	15.7		1	1,537	824	188	158	135	125	d. br.	gr.		
89.	15.5	2d yr.	2	1,654	882	192	157	140	176	d. br.	bl.	1	2
90.	15.4		1	1,653	877	193	147	128	132	l. br.	d. br.	1	
91.	15.11		2	1,670	879	198	151	139	137	d. br.	d. br.	1	
92.	15.11	Jr.	5	1,658	846	193	150	126	116	br.	g. bl.	2	2
93.	15.9		6	1,703	884	190	157	136	132	d. br.	g. bl.	4	6
94.	15.8		1	1,626	842	180	145	136	103	br.	br.		
95.	15.3	2d yr.	1	1,569	847	185	145	126	102	rd.	gr.	1	1
96.	15.6		3	1,783	891	197	151	128	136	d. br.	g. bl.	2	5
97.	15.11		4	1,709	889	215	145	153	135	br.	gr.	1	
98.	15.10		3	1,678	862	188	143	129	122	d. br.	gr.	2	1
99.	15.10	2d yr.	1	1,654	869	194	154	130	130	rd.	bl.	1	3
100.	15.10			1,755	916	197	159	135	135	br.	gr.	1	
101.	15.4	2		1,658	876	195	150	133		d. br.	gr.	1	3
102.	15.11		6	1,752	929	190	154	132	149	d. br.	gr.	1	3
103.	15.5	2d yr.		1,622	840	186	144	127	116	blo.	g. bl.		
104.	15.11	2d yr.	2	1,706	882	180	145	130	125	l. br.	g. bl.		4
105.	15.11	2d yr.	1	1,727	882	185	148	134	133	d. br.	d. br.	3	2
106.	15.9	1st yr.	3	1,663	870	191	146	130	116	br.	gr.		1
107.	15.5	1st yr.	2	1,555	837	183	152	129	93	d. blo.	gr.	2	
108.	15.7	1st yr.	2	1,527	797	184	150	133	97	d. br.	d. br.	1	
109.	15.10	1st yr.	3	1,650	833	185	147	123	114	d. blo.	gr.	2	
110.	15.10		8	1,699	893	184	151	133	130	br.	g. bl.	3	3
111.	15.5		2	1,686	900	186	149	132	131	d. br.	gr.	1	
112.	15.7	1st yr.	1	1,449	755	186	145	119	83	d. br.	d. br.	1	2
113.	15.7		7	1,502	782	187	149	124	91	d. br.	bl.	3	3
114.	15.1		3	1,618	840	196	160	134	112	br.	g. bl.		2
115.	15.11		1	1,717	867	196	159	142	140	br.	br.		
116.	15.8	H. S.	1	1,580	799	186	153	131	115	br.	g. bl.		1
117.	15.1		3	1,615	844	188	149	132	129	b. br.	d. br.	3	
118.	15.11		1	1,622	848	196	150	131	101	d. blo.	gr.		
119.	15.10	H. S.	1	1,556	793	181	142	123	94	d. br.	g. bl.		1
120.	15.3	H. S.	1	1,662	859	187	153	141	138	d. br.	d. br.	1	
121.	15.6	1	3	1,680	855	192	152	132	128	l. br.	bl.		2
122.	15.6		3	1,683	838	194	146	129	112	l. br.	gr.	3	
123.	15.8		3	1,625	844	192	147	121	133	d. br.	d. br.	2	
124.	15.1		2	1,648	875	197	147	128	113	d. br.	d. br.		1
125.	15.0		2	1,723	914	189	151	131	136	br.	bl.	1	1
126.	15.11		1	1,668	895	186	150	132	135	d. br.	gr.		
127.	15.3		3	1,696	894	192	150	134	132	d. br.	d. br.	1	2
128.	15.11		3	1,611	854	182	138	120	105	rd. br.	g. bl.	1	2
129.	15.3		3	1,710	840	205	149	131	138	d. br.	l. br.	3	1
130.	15.1		3	1,446	749	181	151	124	89	br.	gr.	2	
131.	15.2		2	1,751	922	196	150	132	153	d. br.	gr.		2
132.	15.3		2	1,416	743	185	142	123	79	br.	br.	2	1
133.	15.5		2	1,675	860	192	152	135	118	br.	bl.		1
134.	15.6		1	1,610	850	187	151	131	115	d. br.	bl.		
135.	15.7		4	1,695	829	186	149	128	107	d. br.	g. bl.	4	2
136.	15.1		2	1,416	728	187	140	119	69	d. br.	d. br.		3
137.	15.0		2	1,626	850	184	150	132	110	d. br.	bl.	2	3
138.	15.3		4	1,508	795	190	144	117	91	rd. br.	gr. br.	1	2
139.	15.0		3	1,521	798	190	146	123	104	d. br.	d. br.	1	7
140.	15.4		2	1,635	827	183	150	130	109	d. br.	g. bl.	1	2
141.	15.5		2	1,620	849	191	145	121	110	rd. br.	g. br.	1	2
142.	15.1		3	1,466	765	189	147	124	81	d. br.	g. bl.		
143.	15.11	9	2	1,643		182	149	129		bla.	d. br.	1	1
144.	15.7	8	1	1,630		191	155	132		d. br.	g. br.	1	
145.	15.2	8	3	1,558		188	142	121		rd.	bl.	2	1
146.	15.8	8	3	1,639		184	142	127		d. br.	gr.	1	1
147.	15.10	5	1	1,536		187	149	131		d. br.	d. br.		
148.	15.9	3	4	1,512		179	154	135		d. br.	gr.	3	
149.	15.2	4	3	1,522	821	187	149	123		l. br.	gr.	3	1
150.	15.6	5	4	1,482		187	151	130		d. blo.	bl.	1	4
151.	15.1	6	2	1,575		201	147	122		d. br.	bl.	1	2
152.	15.8		2	1,616	808	191	147	130		d. br.	gr.	1	
153.	15.4	7	2	1,688	892	188	145	129		d. br.	gr.		1
154.	15.2			1,733	915	187	150	139		blo.	l. br.		

15-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
155	15.0	9	1,681	883	457	87	127	158	15.1	7	1,600	815	420	70	80
156	15.11	9	1,628	833	421	75	95	159	15.6	6	1,422	780	385	73	77
157	15.6	9	1,509	785	425	75	84	160	15.6	8	1,486	770	400	67	78

REPEATED MEASUREMENTS.

Number in 14-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 14-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
7	15.10	9	1,642	845	445	76	98	48	15.0	---	1,646	860	440	79	102
9	15.8	9	1,622	816	451	80	92	53	15.8	7	1,729	915	455	83	142
10	15.11	9	1,623	838	445	84	123	55	15.6	7	1,622	850	470	88	173
11	15.7	9	1,655	905	450	83	113	56	15.6	6	1,632	830	430	75	93
12	15.9	9	1,650	840	471	87	126	60	15.3	---	1,707	920	470	89	140
14	15.8	9	1,576	810	449	82	105	61	15.9	7	1,584	865	435	75	105
15	15.7	8	1,453	750	408	72	83	64	15.10	9	1,710	920	460	85	129
28	15.11	9	1,736	925	590	90	140	65	15.7	8	1,550	815	440	77	95
29	15.8	9	1,715	920	475	88	136	68	15.7	8	1,619	860	455	83	117
31	15.10	9	1,565	820	420	73	86	79	15.11	9	1,463	780	385	75	103
32	15.0	8	1,591	835	435	83	113	80	15.1	9	1,635	850	430	75	98
33	15.4	8	1,545	810	415	77	97	81	15.1	9	1,560	815	445	75	131
41	15.6	9	1,662	865	495	84	131	85	15.7	7	1,506	775	420	74	91
43	15.8	9	1,566	835	430	83	98	87	15.10	9	1,733	900	490	80	143
44	15.2	9	1,625	840	445	82	106	89	15.9	9	1,683	880	475	81	116
45	15.3	9	1,693	880	490	85	133	90	15.6	9	1,663	885	455	82	127
47	15.2	---	1,651	855	475	90	128								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
1	1,648	112	---	---	---	102	1,765	112	---	---	---
2	1,785	113	---	---	---	103	1,742	110	---	---	---
3	1,756	103	---	---	---	104	1,761	108	---	---	---
74	1,788	105	---	---	---	105	1,833	119	---	---	---
77	1,815	120	---	---	---	106	1,763	128	---	---	---
78	1,683	115	---	---	---	107	1,609	107	---	---	---
79	1,790	111	---	---	---	108	1,622	102	---	---	---
80	1,709	110	---	---	---	109	1,749	116	---	---	---
81	1,695	117	---	---	---	110	1,720	112	---	---	---
82	1,725	114	---	---	---	111	1,754	116	---	---	---
83	1,661	108	---	---	---	112	1,508	107	---	---	---
84	1,695	104	---	---	---	113	1,557	114	---	---	---
85	1,605	102	---	---	---	114	1,662	108	---	---	---
86	1,602	111	---	---	---	115	1,815	119	---	---	---
87	1,485	104	---	---	---	116	1,704	112	---	---	---
88	1,680	103	---	---	---	117	1,660	111	---	---	---
89	1,658	110	---	---	---	118	1,619	112	---	---	---
90	1,720	110	---	---	---	119	1,577	100	---	---	---
91	1,726	123	---	---	---	120	1,763	111	---	---	---
92	1,712	110	---	---	---	121	1,760	114	---	---	---
93	1,793	115	---	---	---	122	1,674	113	---	---	---
94	1,662	106	---	---	---	123	1,670	113	---	---	---
95	1,644	107	---	---	---	124	1,672	105	---	---	---
96	1,810	110	---	---	---	125	1,744	133	---	---	---
97	1,780	113	---	---	---	126	1,719	108	---	---	---
98	1,668	111	---	---	---	127	1,767	114	---	---	---
99	1,730	117	---	---	---	128	1,622	110	---	---	---
100	1,793	116	---	---	---	129	1,790	111	---	---	---
101	1,734	117	---	---	---	130	1,484	123	---	---	---

15-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS—Continued.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
131	1,805	114	-----	-----	-----	141	1,647	108	-----	-----	-----
1	1,456	100	-----	-----	-----	142	1,494	102	-----	-----	-----
1	1,730	113	-----	-----	-----	147	-----	128	-----	-----	-----
134	1,648	108	-----	-----	-----	148	-----	111	190	-----	-----
135	1,725	109	-----	-----	-----	149	1,593	172	151	80	-----
136	1,419	105	-----	-----	-----	150	-----	157	111	70	-----
137	1,686	105	-----	-----	-----	151	-----	180	111	81	-----
138	1,532	101	-----	-----	-----	152	1,644	163	106	-----	-----
139	1,552	110	-----	-----	-----	153	1,735	176	118	85	-----
140	1,640	111	-----	-----	-----	154	1,846	133	-----	-----	-----

16-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	16.10	-----	5	1,641	870	185	145	123	-----	br.	gr.	1	5
2	16.10	-----	5	1,699	894	189	150	131	-----	bla.	br.	2	3
3	16.9	-----	5	1,592	836	190	140	137	-----	blo.	l. br.	1	-----
4	16.7	-----	2	1,590	830	196	153	131	-----	blo.	g. bl.	-----	-----
5	16.0	-----	1	1,640	863	191	147	120	-----	blo.	g. bl.	-----	-----
6	16.11	-----	1	1,557	842	187	153	136	122	l. br.	l. br.	1	1
7	16.7	8	1	1,683	863	190	151	125	110	br.	bl.	1	2
8	16.7	-----	2	1,640	839	195	155	131	127	bla.	g. bl.	1	2
9	16.11	9	2	1,645	895	194	151	132	124	d. br.	g. bl.	1	1
10	16.7	9	2	1,527	827	195	147	125	108	d. br.	br.	-----	1
11	16.0	9	1	1,610	865	175	141	127	100	bla.	bl.	-----	1
12	16.2	9	1	1,681	899	201	158	138	158	-----	-----	-----	-----
13	16.1	9	2	1,646	835	193	148	126	125	bla.	gr.	-----	2
14	16.2	9	2	1,672	885	183	153	134	130	bla.	bl.	-----	1
15	16.0	8	1	1,544	791	179	142	121	91	rd.	bl.	3	2
16	16.1	8	3	1,606	841	186	149	132	104	br.	bl.	2	1
17	16.6	9	2	1,677	859	195	155	137	148	br.	gr.	1	-----
18	16.0	8	3	1,680	870	205	151	128	136	br.	g. bl.	3	1
19	16.2	8	6	1,730	899	195	147	131	129	br.	br.	5	1
20	16.4	9	3	1,677	883	189	153	133	126	br.	br.	2	-----
21	16.7	9	2	1,596	825	181	153	131	120	br.	bl.	3	-----
22	16.8	9	1	1,651	851	197	148	129	129	rd.	g. bl.	1	1
23	16.10	9	2	1,590	817	183	140	123	96	br.	bl.	1	1
24	16.4	9	2	1,671	872	194	139	128	129	br.	bl.	1	3
25	16.2	9	2	1,724	844	188	154	132	144	br.	br.	1	1
26	16.4	7	1	1,690	850	193	147	134	119	d. blo.	g. bl.	-----	-----
27	16.5	-----	-----	1,745	904	186	147	130	-----	-----	-----	3	1
28	16.9	1st yr.	1	1,574	820	189	151	128	-----	br.	br.	-----	-----
29	16.1	Jr.	3	1,607	822	196	149	127	-----	br.	br.	2	2
30	16.9	-----	1	1,715	845	189	147	135	-----	br.	bl.	1	2
31	16.8	-----	1	1,734	882	191	151	138	-----	br.	bl.	1	3
32	16.9	-----	1	1,603	821	199	154	133	-----	rd.	l. br.	1	4
33	16.11	1st yr.	4	1,669	886	207	154	131	-----	br.	gr.	-----	3
34	16.0	1st yr.	3	1,746	901	187	150	132	-----	blo.	bl.	2	1
35	16.8	-----	1	1,625	828	190	148	134	-----	br.	gr.	2	-----
36	16.9	-----	6	1,638	842	187	142	128	-----	br.	br.	2	1
37	16.2	-----	3	1,579	827	183	149	127	-----	l. br.	br.	-----	4
38	16.10	-----	5	1,667	867	204	148	129	-----	d. br.	gr.	2	5
39	16.9	-----	1	1,627	800	195	144	135	-----	br.	gr.	-----	-----
40	16.3	-----	2	1,785	939	201	150	133	-----	br.	g. bl.	-----	-----
41	16.7	-----	2	1,710	869	196	138	122	-----	l. br.	gr.	1	1
42	16.11	3d yr.	2	1,703	864	193	153	130	-----	d. br.	d. br.	-----	-----
43	16.0	Jr.	2	1,737	912	194	151	132	-----	br.	gr.	1	1
44	16.9	Jr.	2	1,660	868	196	144	127	-----	br.	br.	2	-----
45	16.6	-----	1	1,543	846	186	155	134	110	d. br.	g. bl.	5	5
46	16.8	Jr.	2	1,601	827	187	151	130	103	d. br.	g. bl.	1	3
47	16.4	-----	2	1,637	853	188	156	136	112	d. br.	gr.	2	4
48	16.7	-----	6	1,640	830	180	145	120	101	d. br.	l. br.	4	4
49	16.5	Jr.	1	1,698	869	189	148	136	137	br.	g. bl.	-----	-----
50	16.1	Jr.	-----	1,722	893	204	149	134	140	br.	bl.	1	1
51	16.5	-----	8	1,623	865	190	156	136	123	br.	br.	7	2
52	16.5	-----	3	1,748	827	201	155	132	147	br.	g. bl.	1	1
53	16.4	-----	3	1,657	871	187	144	123	111	d. br.	d. br.	4	4
54	16.5	-----	6	1,782	896	183	153	132	135	br.	bl.	4	2

16-year-old boys. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
55	16.3		5	1,650	889	191	144	131	127	br.	bl.	4	1
56	16.5	2d yr.	1	1,775	945	199	151	130	143	d. br.	d. br.	a 1	b 1
57	16.1	2d yr.	3	1,703	887	202	151	131	140	br.	bl.	2	2
58	16.9		2	1,605	854	187	144	125	109	blo.	bl.	1	1
59	16.7		1	1,705	899	198	155	127	139	d. br.	d. br.	2	3
60	16.3		1	1,635	871	183	150	133	124	br.	gr.		
61	16.3		4	1,729	884	202	158	139	149	d. br.	d. br.	2	1
62	16.5	2d yr.	4	1,679	882	184	151	134	130	br.	br.	2	3
63	16.6	2d yr.		1,638	884	188	135	118	110	d. br.	d. br.	1	2
64	16.11		1	1,725	922	191	153	129	128	d. br.	gr.		
65	16.3	2d yr.	7	1,735	905	190	149	131	131	d. br.	d. br.	2	2
66	16.6		4	1,747	905	194	146	126	131	d. br.	d. br.	2	2
67	16.3	1st yr.	2	1,743	912	195	158	139	140	d. br.	l. br.	2	2
68	16.4	1st yr.	2	1,725	870	189	143	126	122	l. br.	g. bl.	2	
69	16.4	1st yr.	1	1,659	845	193	145	130	124	br.	bl.		
70	16.6	1st yr.	2	1,656	854	194	144	122	125	d. br.	g. bl.		1
71	16.4	1st yr.	5	1,719	912	186	145	135	146	d. br.	g. bl.	4	
72	16.6		6	1,571	859	197	155	126	107	br.	l. br.	1	2
73	16.7		3	1,655	872	182	145	128	122	br.	bl.	1	2
74	16.2		4	1,602	848	186	144	128	107	br.	gr.	3	3
75	16.0	1st yr.	1	1,765	933	184	151	141	141	br.	br.	1	1
76	16.6		4	1,596	844	196	146	131	107	br.	gr.	1	2
77	16.6		3	1,670	872	185	158	131	133	d. br.	g. bl.	1	2
78	16.1		1	1,572	804	192	148	128	95	br.	bl.	1	1
79	16.5		3	1,670	894	194	147	132	140	br.	bl.	2	1
80	16.2		3	1,735	912	192	149	130	163	rd.	gr.	1	1
81	16.5		6	1,648	839	190	154	134	127	d. br.	d. br.	4	1
82	16.0		3	1,535	783	176	144	121	88	blo.	bl.	2	1
83	16.1		5	1,648	872	190	142	130	122	d. blo.	bl.	1	3
84	16.1		4	1,743	860	184	149	130	120	d. br.	gr.	2	1
85	16.6		2	1,692	862	193	151	129	145	br.	gr.		1
86	16.1	1st qr.	2	1,621	856	187	148	134	132	d. br.	d. br.	3	4
87	16.3	1st qr.	2	1,589	810	191	152	135	104	d. br.	gr.	1	
88	16.6		3	1,641	858	190	142	123	125	d. br.	gr.	2	1
89	16.11		4	1,685	885	184	153	133	137	d. br.	g. bl.	2	1
90	16.2		9	1,709	-----	198	150	134	-----	l. br.	bl.	2	1
91	16.4		9	1,684	-----	197	154	142	-----	d. br.	gr.	1	1
92	16.6		9	1,635	-----	187	155	129	-----	d. blo.	bl.		
93	16.10		9	1,661	-----	193	148	125	-----			2	
94	16.7		2	1,585	850	181	151	131	109	d. br.	l. br.		
95	16.9		-----	1,640	850	189	147	122	107	blo.	gr.	6	3
96	16.4		1	1,571	830	186	146	121	104	l. br.	bl.		

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
97	16.2	9	1,612	850	450	86	113	100	16.1	9	1,604	857	435	82	121
98	-----	9	1,597	825	430	81	101	101	16.5	9	1,670	890	458	81	105
99	16.3	9	1,556	810	455	78	93	102	16.8	9	1,777	914	476	85	130

REPEATED MEASUREMENTS.

Number in 15-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 15-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
8	16.9	9	1,720	881	472	89	131	29	16.8	9	1,662	905	450	84	135
9	16.11	9	1,682	884	455	80	114	34	16.5	9	1,790	940	485	93	149
13	16.10	-----	1,724	925	470	86	149	42	16.8	9	1,692	890	480	91	136
14	16.9	6	1,490	800	405	82	101	43	16.1	-----	1,621	860	450	86	120
17	16.3	7	1,549	830	425	80	108	45	16.5	8	1,676	910	470	84	112
22	16.8	9	1,554	840	425	78	102	51	16.6	9	1,761	930	500	92	147
25	16.3	9	1,605	845	440	81	104	52	16.1	9	1,723	895	470	84	113
27	16.6	9	1,607	940	440	85	113	64	16.10	9	1,741	905	490	83	106
28	16.11	9	1,713	895	480	85	139	65	16.11	9	1,646	870	440	83	115

a Half brother.

b Half sister.

16-year-old boys. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS—Continued.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
1	1,683	118				65	1,726	111			
2	1,730	112				66	1,843	112			
3	1,642	109				67	1,755	123			
4	1,606	120				68	1,785	119			
37	1,663	117				69	1,693	103			
40	1,809	111				70	1,809	114			
42	1,799	113				71	1,838	119			
43	1,760	122				72	1,548	113			
44		122				73	1,670	113			
45	1,564	107				74	1,603	112			
46	1,633	113				75	1,857	134			
47	1,712	119				76	1,637	113			
48	1,632	112				77	1,776	113			
49	1,738	116				78	1,622	101			
50	1,827	125				79	1,743	117			
51	1,694	118				80	1,822	124			
52	1,799	113				81	1,680	108			
53	1,751	113				82	1,614	106			
54	1,860	112				83	1,712	113			
55	1,667	102				84	1,755	115			
56	1,820	113				85	1,760	116			
57	1,826	122				86	1,698	105			
58	1,690	108				87	1,655	105			
59	1,803	114				88	1,680	119			
60	1,727	111				89	1,702	111			
61	1,776	132				94		175	102	80	450
62	1,800	110				95		162	98	79	455
63	1,683	113				96		168	106	78	415
64	1,709										

17-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	17.8		3	1,742	872	200	144	132		blo.	g. bl.	2	1
2	17.0		2	1,758	876	183	149	129		d. blo.	g. bl.	1	
3	17.9		2	1,734	895	183	147	129		bla.	br.		
4	17.0		4	1,588	830	190	154	132	122	d. br.	bl.	3	2
5	17.5		4	1,630	906	190	148	127	118	d. br.	bl.	2	4
6	17.5		9	1,635	861	196	152	135	137	br.	br.	5	1
7	17.7		9	1,700	909	189	141	127		br.	g. bl.		
8	17.8		1	1,790	897	200	147	130		l. br.	l. br.	3	
9	17.11	Jun.	3	1,677	866	190	145	128		br.	br.		1
10	17.8		4	1,785	935	186	154	137		bla.	br.	1	2
11	17.1		2	1,640	838	199	152	136		l. br.	g. bl.		1
12	17.0		2	1,692	925	191	158	137		br.	br.	1	2
13	17.0		2	1,616	836	195	144	130		br.	br.	1	2
14	17.1		1	1,573	827	178	154	123		d. br.	d. br.	1	
15	17.9		3	1,767	928	200	154	134		br.	gr.	2	1
16	17.1		5	1,716	884	193	155	134	158	br.	gr.	4	1
17	17.3		1	1,683	912	201	147	130	128	d. br.	gr.	3	2
18	17.0		9	1,780	928	188	157	138	175	br.	bl.	6	2
19	17.11	Sen.	7	1,662	864	192	151	130	130	d. br.	gr.	1	3
20	17.6	Sen.	2	1,634	836	184	155	133	110	br.	g. bl.		1
21	17.11	Jun.	1	1,615	843	197	141	129		blo.	g. bl.		1
22	17.5	Jun.	2	1,696	905	207	154	135	145	d. br.	d. br.		1
23	17.5	Sen.	2	1,724	886	192	150	135	132	d. br.	l. br.		1
24	17.3		7	1,654	874	199	156	138	145	br.	br.	3	3
25	17.7		7	1,685	893	190	147	131	135	br.	gr.	3	3
26	17.0		4	1,592	852	188	146	125	112	br.	gr.	2	2
27	17.7		6	1,690	892	184	149	132	136	d. blo.	g. bl.		5
28	17.9		5	1,720	915	194	155	140	146	d. br.	d. br.	3	3
29	17.0		4	1,627	852	186	152	134	121	d. br.	g. bl.	1	3
30	17.3		2	1,712	890	199	152	137	143	d. br.	g. bl.	2	1
31	17.2		1	1,715	930	190	152	129	142	d. br.	gr.	1	2
32	17.1		2	1,739	926	195	150	125	127	d. br.	bl.		1

* Twin.

* Half.

18-year-old boys. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	18.7		3	1,800	930	192	152	140		blo.	gr.	3	
2	18.8		2	1,714	892	185	153	131		d. blo.	gr. bl.		2
3	18.11		4	1,718	919	193	155	139		d. br.	gr. bl.	2	1
4	18.3		1	1,813	920	195	148	130		d. blo.	gr. bl.		1
5	18.7		1	1,725	910	197	147	131		lt.	gr.		2
6	18.2		4	1,752	918	193	145	129		br.	g. bl.		
7	18.10		3	1,515	782	183	154	134	103	bla.	d. br.	2	1
8	18.0		2	1,508	711	188	152	131		blo.	l. br.	1	1
9	18.3		4	1,658	875	193	154	139		l. br.	bl.	3	
10	18.8	Jun.	2	1,794	920	191	148	136		br.	g. bl.		1
11	18.0		3	1,721	907	198	153	135				1	1
12	18.3		8	1,552	835	190	151	134		d. br.	gr.	4	3
13	18.2		1	1,824	967	194	160	144		br.	g. br.	1	3
14	18.7		2	1,728	929	195	153	135		d. br.	gr.	1	
15	18.0		2	1,767	943	206	162	136		br. rd.	g. br.	2	
16	18.0		2	1,586	837	191	149	128		d. br.	br.	1	
17	18.0		4	1,697	857	191	146	131		br.	g. bl.	3	5
18	18.6		3	1,672	892	187	147	134		d. br.	br.	2	
19	18.10		3	1,648	861	188	147	131		blo.	bl.		2
20	18.6		4	1,676	872	196	147	126		blo.	gr.	2	1
21	18.7		1	1,725	934	195	146	137		l. br.	g. bl.		
22	18.1		1	1,630	870	191	149	130		l. br.	bl.		
23	18.9	Sen.	4	1,716	915	190	152	133	122	d. br.	l. br.	4	3
24	18.0	Sen.	9	1,799	922	188	154	136	146	d. br.	gr.	6	3
25	18.11	Sen.	3	1,622	868	191	148	126	121	d. br.	l. br.	1	2
26	18.10	Sen.	2	1,761	899	191	151	134	131	d. br.	gr.		1
27	18.10		1	1,690	895	187	149	132		d. br.	bl.		
28	18.4	Sen.	14	1,638	886	182	158	133	122	d. br.	bl.	10	4
29	18.5	Sen.	12	1,716	904	189	142	130	126	d. blo.	bl.	5	6
30	18.0	Sen.	4	1,769	955	205	150	133	150	l. br.	bl.	2	1
31	18.9	Jun.	1	1,640	858	195	144	130		br.	bl.		
32	18.3	Sen.	6	1,658	891	194	154	137	137	br.	br.	3	4
33	18.3	Sen.	2	1,769	912	188	150	134	149	br.	br.	1	
34	18.4	3	2	1,696	885	197	151	136	118	d. br.	bl.		1
35	18.1		1	1,688	875	193	154	133	176	br.	br.		1
36	18.1		1	1,676	883	196	160	137	127	d. br.	gr.	1	
37	18.8	Jun.	1	1,855	962	190	151	133	142	d. br.	d. dr.		1
38	18.9	Jun.	2	1,676	870	201	153	137	136	d. br.	d. dr.	1	1
39	18.0		3	1,727	886	192	150	131	130	d. br.	bl.	2	3
40	18.5		1	1,702	894	187	153	126	109	l. br.	g. bl.	1	
41	18.6		1	1,746	903	186	154	133	147	d. br.	gr.	4	1
42	18.16		1	1,685	880	178	153	136	140	d. br.	gr.		1
43	18.11	2d yr.	1	1,712	864	189	143	129	130	d. blo.	bl.	1	
44	18.1	2d yr.	3	1,657	892	184	160	138	129	bla.	gr.	3	2
45	18.10		1	1,652	876	196	148	128	133	br.	gr.	1	
46	18.1		2	1,771	903	191	148	138	139			4	2
47	18.11		2	1,749	859	191	151	131	142	d. br.	gr.	2	2
48	18.11		4		838	201	155	143	124	br.	g. bl.	1	2
49	18.9	9	2	1,677		189	148	133		d. br.	g. bl.		2
50	18.0	9		1,593	885								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
1	1,813	125				32	1,727	119			
2	1,738	118				33	1,822	109			
3	1,730	139				34	1,740	117			
4	1,932	121				35	1,766	115			
5	1,802	112				36	1,726	118			
6	1,830	129				37	1,953	112			
19	1,744	115				38	1,762	112			
20	1,773	112				39	1,775	112			
23	1,787	113				40	1,741	112			
24	1,913	124				41	1,798	111			
25	1,667	115				42	1,783	111			
26	1,829	115				43	1,825	100			
27	1,734	113				44	1,715	121			
28	1,687	113				45	1,737	126			
29	1,753	120				46	1,846	112			
30	1,808	121				47	1,878	116			
31	1,716	123				48	1,763	118			

5-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	H e i g h t sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	5.11	-----	3	1,025	580	174	140	113	40	l. br.	bl.	1	2
2	5.11	-----	3	1,060	557	172	145	114	42	l. br.	g. bl.	1	1
3	5.11	-----	3	1,142	631	180	150	125	51	d. br.	bl.	1	2
4	5.9	-----	5	1,112	593	168	145	113	43	bl.	d. br.	2	2
5	5.9	-----	4	1,096	582	185	147	115	46	l. br.	bl.	2	2
6	5.7	1	a	1,132	616	185	135	110	45	blo.	d. br.	1	1
7	5.7	1	a	1,107	620	185	133	109	43	blo.	d. br.	1	1
8	5.9	1	5	1,068	604	173	135	107	37	blo.	br.	2	2
9	5.8	1	2	998	547	169	137	112	35	br.	bl.	2	2
10	5.10	1	4	1,154	634	166	135	114	48	redbr.	gr.	4	4
11	5.10	1	4	1,047	591	168	137	111	42	br.	gr.	2	2
12	5.8	1	3	1,050	588	166	142	110	36	d. br.	gr.	1	1
13	5.10	1	1	1,007	543	157	142	109	33	br.	d. br.	2	2
14	5.11	1	2	1,029	581	164	130	105	34	l. br.	l. bl.	1	1
15	5.11	1	2	1,085	615	177	139	114	46	br.	bl.	1	1
16	5.3	1	-----	1,067	591	173	136	118	34	br.	l. br.	2	2
17	5.9	1	-----	1,129	617	177	143	115	43	br.	br.	2	2
18	5.6	1	-----	1,080	612	173	145	113	45	l. br.	l. br.	2	2
19	5.0	1	-----	1,087	584	170	143	115	42	d. br.	bl.	2	2
20	5.7	1	4	1,130	612	176	133	114	42	d. blo.	bl.	2	4
21	5.9	1	5	1,140	620	174	139	114	40	br.	gr.	1	3
22	5.0	1	2	1,007	574	180	139	112	37	d. br.	d. br.	1	2
23	5.10	1	3	1,087	597	171	134	111	40	br.	bl.	1	2
24	5.8	1	4	998	574	168	132	108	33	d. br.	d. br.	4	1
25	5.8	1	2	1,054	584	169	129	100	35	l. br.	d. br.	1	1
26	5.6	1	1	1,050	589	164	130	111	40	d. br.	g. bl.	1	1
27	5.4	1	2	1,033	578	181	138	112	41	d. br.	bl.	1	1
28	5.7	1	2	1,000	545	180	136	108	32	blo.	bl.	1	1
29	5.3	1	4	1,045	580	162	134	110	38	a. br.	bl.	2	1
30	5.10	1	1	1,083	577	177	139	107	37	br.	gr.	1	1
31	5.1	1	2	1,071	563	180	141	113	40	br.	bl.	1	1
32	5.7	1	1	1,058	586	170	132	114	36	br.	d. br.	1	1
33	5.7	1	3	1,025	590	170	136	112	40	br.	bl.	4	2
34	5.9	1	5	1,050	581	176	138	112	40	br.	bl.	1	1
35	5.10	1	3	1,123	620	180	142	112	44	br.	gr.	2	1
36	5.4	1	2	991	562	184	137	105	33	blo.	bl.	1	1
37	5.11	1	1	1,100	597	177	139	116	42	flax.	gr.	1	1
38	5.4	1	1	1,181	618	177	132	102	43	blo.	g. bl.	1	1
39	5.5	1	2	1,125	-----	165	139	114	-----	d. blo.	bl.	1	1
40	5.4	1	1	1,085	621	172	140	117	-----	blo.	bl.	1	1
41	5.8	1	-----	1,052	580	-----	-----	-----	38	-----	-----	-----	-----

*Twin.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	B r e a d t h of hand.	Number.	Finger reach.	Height of face (1).	Height of face (2).	B r e a d t h of hand.
33	1,002	88	-----	-----	37	1,104	94	-----	-----
34	1,027	90	-----	-----	38	1,112	90	-----	-----
35	1,107	96	-----	-----	39	-----	86	141	-----
36	999	89	-----	-----	40	1,090	81	126	53

6-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	6.0		a 4	1,049	590	166	159	109	42	blo.	bl.	2	1
2	6.6		a 2	1,104	637	173	137	117	51	br.	l. br.	2	1
3	6.11	1	1	1,214	649	172	143	119	54	d. br.	br.	1	1
4	6.6		a 4	1,089	588	174	143	115	41	blo.	g. bl.	1	2
5	6.0	1	5	1,080	563	170	140	110	37	blo.	bl.	2	2
6	6.4		7	1,136	643	169	138	112	46	br.	g. bl.	3	3
7	6.11	1	2	1,120	635	182	138	110	46	blo.	gr.	1	1
8	6.1	1	1	1,126	635	177	144	117	45	d. blo.	bl.	2	2
9	6.4	1	5	1,137	636	171	137	113	43	d. br.	d. br.	2	2
10	6.5	1	1	1,031	593	164	134	115	41	br.	g. bl.	2	1
11	6.7	2	2	1,107	621	176	134	107	42	d. blo.	gr.	2	4
12	6.3			1,132	623	168	140	112	48	blo.	g. bl.	2	2
13	6.4	1	3	1,130	612	175	138	110	47	br.	l. br.	1	1
14	6.7	1	4	1,121	619	170	139	107	45	d. blo.	gr.	2	2
15	6.1	1	2	1,063	542	172	137	108	44	d. blo.	gr.	1	1
16	6.3	1	11	1,057	560	169	134	112	37	br.	l. br.	3	8
17	6.4	1	2	1,095	608	178	145	114	45	br.	bl.	1	1
18	6.9	1	1	1,126	611	176	144	111	43	br.	gr.	1	1
19	6.2	1	2	1,184	626	178	134	111	45	br.	bl.	1	1
20	6.8	1	6	1,104	598	178	136	115	47	br.	g. br.	1	4
21	6.6	1	5	1,143	646	180	122	112	49	br.	l. br.	1	5
22	6.10	2	2	1,170	653	173	133	111	52	d. br.	d. br.	2	1
23	6.5		a 2	1,069	575	173	135	118	40	d. br.	d. br.	1	1
24	6.7	1	4	1,086	620	180	142	111	43	d. br.	br.	2	2
25	6.1	1	3	1,070	598	165	134	109	38	br.	bl.	2	2
26	6.1	1	2	1,015	591	175	134	111	37	l. blo.	l. gr.	1	1
27	6.6	1	3	1,094	628	171	140	115	43	d. br.	bl.	3	4
28	6.5	1	1	1,130	630	166	138	113	42	br.	br.	1	1
29	6.10	2	3	1,175	666	166	142	113	43	red.	bl.	2	1
30	6.9	1		1,198	653	177	146	117	52	l. br.	bl.		
31	6.6	1		1,144	629	171	146	114	43	d. br.	bl.		
32	6.1	1		1,084	581	170	132	115	39	blo.	bl.		
33	6.1	1		1,106	625	175	142	117	45	d. blo.	bl.		
34	6.9	1		1,083	600	170	159	112	39	br.	g. bl.		
35	6.9	1		1,112	597	169	135	119	42	blo.	bl.		
36	6.3	1		1,103	613	173	129	113	46	br.	bl.		
37	6.9	1		1,089	589	165	137	112	41	d. br.	d. br.		
38	6.3	1		1,150	667	172	141	120	54	br.	br.		
39	6.0	1		1,057	612	165	133	112	41	red.	bl.		
40	6.1	1		1,146	629	175	143	119	52	br.	br.		
41	6.3	1		1,133	628	177	136	115	45	br.	bl.		
42	6.0	1	9	1,102	620	165	140	116	41	d. br.	bl.	7	3
43	6.9	1	3	1,160	640	182	142	112	42	br.	bl.	1	2
44	6.7	3	1	1,194	657	170	139	121	49	rd. br.	gr.		
45	6.8	2	4	1,132	650	170	139	111	45	br.	g. br.	3	
46	6.8	2	1	1,107	592	173	138	112	41	d. br.	bl.	1	
47	6.10	2	2	1,160	667	174	146	114	45	br.	gr.		4
48	6.10	2	2	1,096	621	175	135	110	41	l. br.	gr.	1	1
49	6.5	1	4	1,110	610	172	133	107	40	br.	bl.	2	1
50	6.4	1	3	1,115	638	174	138	108	41	d. blo.	bl.	1	1
51	6.10	1	5	1,171	650	174	140	116	50	l. br.	bl.	2	2
52	6.5	1	3	1,167	638	183	138	113	47	l. br.	l. br.	1	1
53	6.8	1	1	1,174	639	181	140	116	51	l. br.	l. br.	1	1
54	6.0	1	9	1,038	594	171	135	107	36	br.	br.	6	2
55	6.6	1	5	1,141	580	168	133	107	41	br.	bl.	4	2
56	6.0	1	3	1,113	618	170	134	115	39	l. br.	l. br.	1	2
57	6.7	1	7	1,106	618	174	135	113	39	br.	br.	3	4
58	6.0	1	5	1,096	582	164	137	110	34	br.	bl.	2	2
59	6.0	1	3	1,067	616	172	126	105	39	d. br.	d. br.	1	3
60	6.1	2	3	1,150	617	175	135	111	42	gold.	g. br.	1	1
61	6.2	1	2	1,135	613	180	135	109	43	aub.	g. bl.	2	
62	6.3	1	1	1,175	630	175	138	119	46	l. br.	gr.		
63	6.5	1	2	1,052	588	166	141	116	42	blo.	gr.	1	
64	6.1	1	1	1,082	608	174	139	114	39	br.	g. bl.	1	
65	6.6	1	2	1,139	607	170	139	113	41	l. br.	gr.		1
66	6.8	1	3	1,162	635	171	133	111	45	br.	g. bl.	2	
67	6.1	1	3	1,059	590	175	137	110	42	blo.	bl.	2	2
68	6.3	1	6	1,044	589	175	133	107	42	l. br.	l. br.	3	5
69	6.4	1	1	1,058	590	174	132	102	35	d. blo.	gr.		1
70	6.5	1	1	1,031	591	178	131	103	39	l. br.	d. br.		
71	6.0	1	3	1,064	593	175	137	112	40	l. br.	bl.	2	
72	6.4	1	1	1,108	605	174	139	112	47	gd. br.	gr.	1	1
73	6.11	1	3	1,146	619	174	134	119	44	blo.	bl.		2
74	6.0	1	1	1,240	638	167	144	119	56	br.	gr.		
75	6.8	1	5	1,152	632	171	133	110	53	br.	gr.	4	2
76	6.6	1	2	1,101	609	179	142	116	46	l. tr.	bl.	2	1
77	6.4		3	1,103	602	167	135	105	43	d. br.	bl.	2	2

*Twin.

6-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
78.....	6.11	2	2	1,186	-----	178	139	117	-----	d. br.	gr.	-----	1
79.....	6.7	1	2	1,080	-----	176	140	112	-----	l. br.	bl.	-----	1
80.....	6.11	1	2	1,152	-----	177	137	112	-----	d. blo.	bl.	1	2
81.....	6.3	1	1	1,205	-----	174	139	115	-----	d. blo.	l. br.	1	1
82.....	6.9	1	5	1,102	-----	178	139	116	-----	l. br	d. br.	2	2
83.....	6.0	-----	2	1,147	647	185	143	118	-----	d. blo.	bl.	1	-----
84.....	6.0	-----	2	1,084	616	170	136	110	-----	blo.	gr.	-----	1

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Fore- arm.	Breadth of hand.	Weight.
85.....	6.11	2	1,138	598	310	57	41
86.....	-----	1	1,135	655	305	61	45

REPEATED MEASUREMENTS.

Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
2.....	6.11	2	1,134	628	308	62	50	17.....	6.9	2	1,190	630	310	62	47
4.....	6.8	1	1,180	648	330	63	50	18.....	6.7	1	1,148	625	315	64	50
5.....	6.2	2	1,154	620	310	66	54	21.....	6.9	2	1,202	635	325	56	44
6.....	6.7	1	1,173	620	297	57	49	22.....	6.4	1	1,055	590	270	56	42
7.....	6.7	1	1,167	622	312	55	47	23.....	6.11	2	1,150	615	300	58	44
11.....	6.11	2	1,102	610	300	55	44	24.....	6.9	2	1,153	585	290	56	37
13.....	6.10	-----	1,055	585	280	53	38	25.....	6.5	1	1,131	605	290	54	39
15.....	6.11	-----	1,142	640	305	61	51	28.....	6.9	1	1,066	575	280	53	36
16.....	6.4	1	1,130	610	310	54	39	29.....	6.5	1	1,100	610	290	58	41

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.
67.....	1,042	91	-----	-----	76.....	-----	89	-----	-----
68.....	1,044	84	-----	-----	77.....	1,083	91	-----	-----
69.....	1,084	96	-----	-----	78.....	1,090	91	-----	-----
70.....	1,054	86	-----	-----	79.....	-----	84	142	-----
71.....	1,034	88	-----	-----	80.....	-----	95	147	-----
72.....	1,127	90	-----	-----	81.....	-----	92	139	64
73.....	1,122	90	-----	-----	82.....	-----	95	142	55
74.....	1,284	96	-----	-----	83.....	1,131	87	147	57
75.....	1,112	93	-----	-----	84.....	1,057	85	130	53

7-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	7.5		2	1,187	632	176	141	120	51	l. br.	bl.	2	1
2	7.5		4	1,069	599	172	141	117	46	l. br.	bl.	2	3
3	7.1		3	1,161	644	170	140	114	42	d. br.	g. bl.	3	5
4	7.9		2	1,226	655	170	142	118	54	l. br.	d. br.	1	1
5	7.5	1	1	1,155	646	187	139	114	51	br.	d. br.	2	3
6	7.9		2	1,213	659	171	144	117	50	br.	g. bl.	1	1
7	7.1		2	1,230	658	181	145	113	48	br.	d. br.	1	1
8	7.1	2	1	1,162	647	174	141	115	52	gold.	bl.	1	1
9	7.8		3	1,301	729	188	133	113	61	d. blo.	d. br.	1	1
10	7.1		3	1,066	609	166	138	108	36	blo.	bl.	2	1
11	7.6	3	1	1,231	646	183	137	114	47	blo.	g. bl.	1	2
12	7.10		1	1,188	640	172	140	119	48	br.	d. br.	1	1
13	7.1		2	1,156	632	172	136	112	47	br.	d. br.	1	2
14	7.4		2	1,143	631	168	148	112	47	rd. br.	bl.	4	5
15	7.8	1	2	1,185	658	176	135	105	45	blo.	bl.	2	1
16	7.1	1	4	1,132	627	183	140	115	49	blo.	bl.	3	1
17	7.8	1	1	1,182	659	176	146	120	55	red.	bl.	3	2
18	7.11	1	6	1,172	633	171	139	112	50	br.	bl.	3	2
19	7.1	1	4	1,157	641	179	138	114	49	d. br.	gr.	3	2
20	7.1	3	2	1,253	659	179	135	111	51	br.	gr.	2	1
21	7.6	3	4	1,228	684	173	141	118	56	br.	l. br.	4	1
22	7.8	3	3	1,211	671	168	138	111	51	blo.	bl.	1	1
23	7.7	3	5	1,177	619	176	142	119	52	d. br.	l. br.	1	3
24	7.9	2	2	1,217	610	174	137	117	59	d. br.	bl.	1	1
25	7.4	2	5	1,204	614	173	145	117	47	br.	br.	4	1
26	7.8	2	3	1,227	644	170	143	116	47	blo.	gr.	2	5
27	7.3	2	4	1,134	617	160	142	112	41	d. blo.	br.	2	1
28	7.8	1	1	1,187	636	176	142	113	51	blo.	bl.	2	2
29	7.8	2	1	1,315	681	188	149	118	76	redbr.	br.	1	1
30	7.3	1	5	1,104	591	166	128	107	41	red.	gr.	1	3
31	7.5	1	2	1,112	598	164	140	113	43	d. br.	bl.	1	2
32	7.4	1	1	1,131	611	164	141	113	43	d. br.	bl.	1	1
33	7.8	1	2	1,211	651	186	133	117	56	br.	d. br.	1	1
34	7.5	2	5	1,142	617	175	141	117	47	br.	br.	2	3
35	7.5	2	1	1,198	676	173	141	116	53	br.	bl.	1	1
36	7.7	2	1	1,201	677	178	142	118	54	br.	gr.	2	2
37	7.4	1	1	1,040	583	175	129	110	38	br.	g. bl.	1	1
38	7.10	1	1	1,120	620	164	135	111	42	br.	d. br.	2	2
39	7.3	1	1	1,218	657	168	136	113	55	br.	bl.	1	1
40	7.2	1	1	1,100	610	170	144	113	44	br.	bl.	1	2
41	7.8		1	1,215	657	175	138	119	60	br.	g. bl.	1	1
42	7.7	2	3	1,211	657	178	127	113	46	l. br.	gr.	1	1
43	7.7	2	2	1,192	660	178	140	114	56	br.	br.	1	1
44	7.4	2	1	1,159	625	175	144	117	48	blo.	gr.	1	2
45	7.3	2	4	1,134	616	168	137	113	39	l. br.	bl.	1	2
46	7.9	2	6	1,260	677	175	138	113	54	br.	gr.	3	2
47	7.7	1		1,082	638	179	135	112	45	blo.	bl.	1	1
48	7.8	1		1,222	681	173	139	114	51	br.	bl.	2	1
49	7.1	2	4	1,036	576	176	137	110	40	br.	gr.	2	1
50	7.1	2	4	1,212	653	177	142	115	51	br.	bl.	2	2
51	7.5	2	2	1,192	663	168	140	120	54	br.	d. br.	1	1
52	7.9	2	5	1,177	643	178	142	110	46	br.	gr.	2	2
53	7.0	1	2	1,127	624	182	139	115	45	br.	bl.	1	3
54	7.4	1	5	1,122	596	167	140	118	41	br.	bl.	2	5
55	7.0	1	5	1,109	624	167	142	113	38	br.	br.	2	4
56	7.8	3	1	1,254	640	175	140	119	51	br.	br.	1	1
57	7.5	2	2	1,169	657	172	135	106	42	blo.	bl.	1	1
58	7.1	2	2	1,083	601	170	140	110	42	l. br.	bl.	1	1
59	7.7	2	1	1,193	655	194	144	116	45	d. br.	d. br.	1	1
60	7.9	2	3	1,197	656	169	141	115	53	br.	bl.	1	2
61	7.0	2	5	1,229	689	180	141	117	53	br.	br.	2	1
62	7.11	2	6	1,167	647	179	143	123	49	red.	bl.	2	2
63	7.3	2	4	1,202	665	182	141	119	52	br.	gr.	1	1
64	7.7	1	1	1,145	620	178	137	115	45	br.	bl.	1	1
65	7.9	3	6	1,240	655	175	145	118	49	blo.	bl.	4	3
66	7.3	1	6	1,188	650	179	135	111	46	br.	bl.	4	2
67	7.8	1	8	1,110	643	174	134	115	42	d. br.	d. br.	6	2
68	7.4	1	1	1,072	588	170	135	109	37	d. br.	d. br.	1	1
69	7.0	1	1	1,036	580	169	135	114	41	br.	d. br.	1	1
70	7.2	1	1	1,088	587	170	130	105	37	d. br.	g. bl.	1	1
71	7.11	3	3	1,204	646	173	141	112	48	blo.	bl.	2	1
72	7.6	3	3	1,174	638	169	143	112	45	d. blo.	bl.	2	1
73	7.9	3	3	1,140	626	174	147	119	44	blo.	bl.	1	1
74	7.4	2	2	1,190	593	178	136	111	47	br.	bl.	1	1
75	7.6	2	1	1,203	660	176	137	113	51	blo.	bl.	1	1
76	7.7	2	1	1,198	644	179	144	116	52	blo.	bl.	1	1
77	7.8	2	1	1,197	630	176	144	117	45	br.	gr.	1	1
78	7.0	1	3	1,165	627	173	137	111	39	br.	d. br.	1	2
79	7.4	1	5	1,288	684	176	145	116	53	br.	gr.	2	2

7-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
80	7.5	1	2	1,133	622	173	139	117	42	d. br.	gr.	2	---
81	7.10	1	1	1,109	600	165	139	112	37	br.	gr.	1	1
82	7.0	1	1	1,101	622	173	139	119	43	d. br.	d. br.	1	3
83	7.5	1	1	1,111	615	173	136	111	41	l. br.	g. bl.	---	---
84	7.4	1	1	1,181	663	167	140	113	42	br.	gr.	1	1
85	7.5	1	1	1,206	660	167	141	118	47	blo.	bl.	1	1
86	7.10	1	1	1,085	628	173	136	108	42	d. br.	d. br.	1	2
87	7.10	3	3	1,294	---	175	135	115	---	d. br.	l. br.	1	4
88	7.4	3	1	1,257	---	188	139	118	---	d. br.	d. br.	2	1
89	7.11	1	1	1,305	---	172	137	114	---	d. blo.	g. bl.	2	0
90	7.8	1	1	1,166	---	178	136	112	---	black.	d. br.	---	---
91	7.9	1	1	1,213	---	177	139	113	---	blo.	gr.	---	7
92	7.6	1	1	1,215	---	174	134	113	---	d. br.	gr.	1	1
93	7.9	1	1	1,215	---	166	127	111	---	l. r.	bl.	3	1
94	7.3	1	1	1,173	---	182	140	113	---	l. br.	bl.	3	3
95	7.6	1	1	1,083	---	178	137	113	---	d. br.	bl.	5	3
96	7.11	1	1	1,117	---	172	134	114	---	red br.	gr.	---	---
97	7.4	1	2	1,125	---	185	136	115	---	d. br.	l. br.	1	---
98	7.6	1	4	1,135	---	179	137	112	---	blo.	g. bl.	2	1
99	7.7	2	3	1,211	---	182	143	115	---	d. br.	bl.	1	2
100	7.0	1	1	1,180	(4)	182	137	114	---	red.	l. br.	---	3
101	7.6	3	4	1,085	---	172	143	111	---	d. br.	g. bl.	1	1

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
102	7.4	---	1,152	635	295	54	44	104	7.7	2	1,225	685	315	53	51
103	7.5	2	1,152	610	301	59	47								

REPEATED MEASUREMENTS.

Number in 6-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 6-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1	7.0	2	1,095	625	310	54	46	32	7.0	2	1,148	585	300	57	43
6	7.5	2	1,202	670	330	61	53	33	7.0	2	1,168	635	320	61	48
7	7.11	2	1,169	633	335	60	49	34	7.9	2	1,135	610	310	58	43
8	7.1	1	1,133	633	307	59	48	35	7.10	1	1,173	620	305	63	46
9	7.3	1	1,187	645	302	58	48	37	7.10	1	1,151	625	295	59	43
11	7.8	2	1,164	780	305	60	46	38	7.3	2	1,267	685	335	64	61
13	7.5	2	1,176	655	315	60	51	39	7.0	1	1,165	650	295	56	45
15	7.2	1	1,109	595	305	55	39	40	7.0	2	1,197	645	330	62	53
16	7.3	1	1,109	595	295	55	41	41	7.4	1	1,200	645	310	58	49
18	7.10	2	1,187	625	320	57	50	42	7.1	2	1,145	620	310	58	44
19	7.3	2	1,259	660	345	61	54	44	7.8	4	1,249	675	330	63	56
21	7.8	1	1,209	675	320	57	56	45	7.8	2	1,198	670	305	60	49
23	7.5	1	1,135	625	305	60	47	46	7.8	2	1,172	605	325	60	47
24	7.6	---	1,150	630	320	57	47	47	7.10	2	1,223	660	315	60	54
25	7.1	---	1,113	620	298	54	40	49	7.9	2	1,178	630	315	59	46
26	7.1	---	1,070	605	280	53	40	50	7.6	2	1,108	635	320	60	44
28	7.6	---	1,185	655	315	56	48	---	7.6	2	1,247	675	320	62	53
29	7.11	3	1,227	670	310	58	45	---	7.0	1	1,103	630	290	52	39
30	7.9	2	1,250	670	325	60	57	---							

Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 5-year series.	Age.	Grade.	Stature.	Height sitting.	Foreman.	Breadth of hand.	Weight.
1	7.1	1	1,077	590	295	56	43	3	7.0	2	1,203	671	315	60	54

7-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
84	1,172	97	—	—	—	93	—	93	152	—	—
85	1,219	94	—	—	—	94	—	95	140	—	—
86	1,082	91	—	—	—	95	—	84	125	58	—
87	—	93	137	—	—	96	—	97	147	61	—
88	—	93	147	—	—	97	—	89	126	57	—
89	—	92	147	—	—	98	—	91	142	55	—
90	—	101	155	—	—	99	—	96	145	63	—
91	—	90	146	—	—	100	1,182	85	134	58	—
92	—	95	145	—	—	101	—	150	94	53	285

8-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	8.9	—	2	1,225	654	175	143	120	53	blo.	g. bl.	—	1
2.	8.10	4	4	1,226	652	180	147	118	55	blo.	g. bl.	—	2
3.	8.9	4	2	1,253	670	183	145	116	53	br.	bl.	1	1
4.	8.6	—	1	1,198	673	183	137	113	49	blo.	br.	3	1
5.	8.6	—	6	1,233	685	180	142	119	56	d. br.	g. bl.	3	2
6.	8.6	—	4	1,232	678	181	140	117	57	br.	d. br.	1	2
7.	8.8	—	5	1,246	679	179	134	112	51	d. blo.	g. br.	4	1
8.	8.11	2	2	1,199	661	182	141	118	55	—	d. br.	1	4
9.	8.11	—	1	1,204	658	170	136	111	51	blo.	g. bl.	1	—
10.	8.5	—	a	1,185	626	169	132	107	45	blo.	bl.	1	2
11.	8.11	—	2	1,240	680	173	143	116	53	d. blo.	d. br.	3	2
12.	8.8	—	5	1,225	654	176	135	114	44	br.	br.	1	3
13.	8.11	—	9	1,255	668	179	145	118	58	d. br.	l. br.	1	7
14.	8.0	—	7	1,283	703	175	143	115	60	br.	g. bl.	3	3
15.	8.8	—	2	1,191	656	180	136	110	47	blo.	gr.	1	2
16.	8.2	—	2	1,234	668	168	140	112	52	red.	bl.	3	—
17.	8.5	—	1	1,163	657	173	132	109	43	blo.	gr.	—	—
18.	8.4	—	3	1,119	619	169	132	110	46	g. br.	gr.	3	—
19.	8.4	2	3	1,141	648	169	141	113	50	blo.	bl.	2	1
20.	8.1	1	3	1,195	639	183	148	115	48	d. blo.	bl.	1	2
21.	8.1	1	2	1,254	696	175	149	119	57	br.	d. br.	1	—
22.	8.11	4	3	1,360	709	180	141	118	79	blo.	gr.	5	—
23.	8.10	3	1	1,237	662	170	136	119	48	d. blo.	bl.	3	1
24.	8.7	3	5	1,252	670	181	140	115	53	br.	bl.	2	4
25.	8.5	3	1	1,240	668	175	141	113	55	br.	l. br.	2	—
26.	8.10	3	5	1,135	612	179	138	104	43	br.	br.	2	2
27.	8.7	—	2	1,236	648	177	130	113	47	d. br.	bl.	1	2
28.	8.3	—	1	1,240	654	179	149	122	51	d. blo.	gr.	1	—
29.	8.1	—	1	1,324	650	179	138	119	56	d. blo.	bl.	1	—
30.	8.3	—	2	1,241	670	175	140	114	53	d. br.	l. bl.	1	2
31.	8.8	—	4	1,197	626	175	148	114	49	br.	br.	2	1
32.	8.5	—	1	1,191	643	157	147	112	45	d. blo.	bl.	1	1
33.	8.2	—	3	1,164	633	178	135	108	45	d. blo.	bl.	—	—
34.	8.2	—	3	1,167	640	181	139	112	41	blo.	l. br.	2	—
35.	8.8	—	2	1,221	650	165	144	114	51	br.	bl.	3	5
36.	8.11	2	2	1,238	671	173	146	115	47	br.	bl.	3	—
37.	8.4	2	3	1,233	705	180	142	120	66	br.	br.	3	3
38.	8.4	1	3	1,110	620	160	133	115	50	br.	br.	2	2
39.	8.4	1	2	1,100	605	155	136	110	42	br.	br.	1	2
40.	8.5	3	1	1,178	630	165	141	117	44	br.	gr.	1	—
41.	8.4	5	5	1,389	720	165	142	120	60	d. br.	g. bl.	2	2
42.	8.0	3	5	1,282	672	174	141	118	62	br.	g. bl.	2	3
43.	8.7	3	1	1,253	671	179	142	118	60	br.	bl.	1	—
44.	8.9	—	4	1,257	698	176	134	110	48	blo.	bl.	2	1
45.	8.3	3	4	1,120	610	170	142	119	50	br.	bl.	2	1
46.	8.10	3	4	1,257	686	186	146	121	63	—	—	2	1
47.	8.1	2	1	1,289	690	178	141	113	55	br.	br.	2	—
48.	8.3	2	2	1,258	680	177	143	117	51	br.	bl.	—	2

* Twin brother.

8-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
49	8.0	2	2	1,193	650	173	145	114	51	d. br.	bl.	1	1
50	8.7	2	1	1,248	680	177	135	119	53	d. br.	bl.	2	3
51	8.11	2	1	1,124	633	170	136	112	41	l. br.	bl.	2	6
52	8.5	2	5	1,221	679	170	145	121	53	br.	bl.	1	1
53	8.7	2	3	1,115	611	175	141	111	39	blo.	bl.	1	1
54	8.0	2	1	1,234	672	172	143	122	54	l. br.	bl.	1	1
55	8.2	2	1	1,202	653	171	141	113	51	blo.	g. bl.	1	1
56	8.6	2	1	1,255	666	180	148	119	55	d. br.	bl.	1	1
57	8.3	1	1	1,253	664	179	143	123	58	br.	br.	1	1
58	8.6	3	2	1,205	653	181	141	117	54	d. br.	g. br.	1	1
59	8.3	3	2	1,095	603	162	128	103	32	br.	bl.	3	1
60	8.2	2	8	1,214	695	170	145	113	55	br.	bl.	5	2
61	8.10	4	4	1,223	670	184	144	124	45	br.	bl.	1	6
62	8.7	3	3	1,221	640	190	141	122	55	d. br.	gr.	1	1
63	8.9	3	3	1,185	644	175	140	122	51	d. blo.	g. bl.	1	1
64	8.4	3	1	1,184	608	170	141	123	46	br.	br.	1	1
65	8.0	3	1	1,240	650	166	133	115	51	d. br.	d. br.	1	1
66	8.8	2	2	1,181	648	181	143	107	46	d. br.	br.	1	2
67	8.1	2	2	1,227	655	170	138	115	50	br.	bl.	1	1
68	8.5	2	1	1,240	654	176	143	120	55	d. br.	br.	1	1
69	8.4	2	2	1,133	614	170	145	110	47	br.	gr.	2	1
70	8.9	2	1	1,332	708	181	130	111	63	d. br.	d. br.	1	3
71	8.1	2	2	1,240	675	174	141	121	55	br.	bl.	2	1
72	8.1	1	2	1,107	586	170	135	108	41	br.	g. bl.	1	1
73	8.0	1	1	1,118	636	179	138	109	42	br.	gr.	2	1
74	8.5	5	5	1,180	633	179	146	118	47	br.	br.	2	2
75	8.11	5	6	1,330	716	178	136	117	72	br.	gr.	3	2
76	8.5	3	3	1,218	622	175	143	118	52	br.	g. bl.	1	1
77	8.3	3	6	1,273	672	176	140	114	50	blo.	g. bl.	1	5
78	8.8	3	5	1,248	652	175	145	119	55	br.	l. br.	3	1
79	8.9	3	1	1,285	683	179	137	118	55	blo.	bl.	1	1
80	8.4	2	2	1,181	623	174	146	121	55	br.	br.	1	1
81	8.0	2	6	1,218	661	178	143	118	57	l. blo.	bl.	3	2
82	8.7	1	1	1,211	622	176	145	117	49	blo.	bl.	1	1
83	8.0	1	1	1,164	632	176	136	112	41	br.	bl.	1	1
84	8.1	2	2	1,164	622	165	135	107	46	d. br.	d. br.	1	3
85	8.3	3	1	1,276	683	183	138	120	52	d. blo.	g. br.	1	1
86	8.11	3	1	1,229	675	175	136	117	47	d. blo.	g. bl.	1	2
87	8.4	5	5	1,254	682	182	133	111	47	br.	d. br.	2	1
88	8.2	2	1	1,206	622	170	142	117	47	d. br.	l. br.	2	2
89	8.1	2	3	1,174	617	167	138	111	41	l. br.	bl.	1	1
90	8.8	2	1	1,224	670	170	130	118	47	l. br.	bl.	1	1
91	8.9	3	1	1,278	672	172	143	116	51	d. br.	gr.	2	2
92	8.10	1	1	1,222	684	136	121	121	42	blo.	bl.	2	3
93	8.0	1	2	1,178	666	142	121	121	42	blo.	bl.	1	1
94	8.6	2	1	1,237	679	135	118	118	47	l. br.	d. br.	1	1
95	8.6	2	1	1,253	671	140	119	119	47	d. br.	l. br.	1	1
96	8.3	3	2	1,263	683	183	146	120	47	blo.	bl.	2	1
97	8.7	4	1	1,296	643	184	142	117	47	d. br.	l. br.	1	1
98	8.6	4	7	1,322	730	173	143	117	47	d. br.	l. br.	1	6
99	8.8	4	5	1,240	690	178	136	108	47	d. br.	bl.	1	3
100	8.7	4	3	1,172	680	131	115	115	47	blo.	d. br.	2	2
101	8.8	4	4	1,345	687	137	116	116	47	l. br.	l. br.	1	3
102	8.11	4	1	1,261	675	137	114	114	47	d. br.	d. br.	1	1
103	8.7	4	1	1,222	680	143	123	123	47	d. blo.	bl.	1	1
104	8.7	4	4	1,155	672	147	125	125	47	d. br.	d. br.	1	6
105	8.4	3	3	1,264	674	140	120	120	47	d. br.	bl.	1	1
106	8.6	3	2	1,215	672	141	116	116	47	d. br.	gr.	3	1

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
107	8.2	3	1,127	630	295	62	45	111	8.10	2	1,230	670	325	62	51
108	8.2	3	1,154	630	313	56	43	112	8.3	1	1,203	590	310	59	44
109	8.1	2	1,182	660	305	57	55	113	8.6	2	1,262	665	345	67	57
110	8.7	3	1,243	690	340	60	57	114	8.2	2	1,164	640	310	54	46

8-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
2	8.6	2	1,144	625	310	58	47	35	8.6	2	1,260	690	490	66	56
4	8.10	2	1,273	690	345	61	60	37	8.4	2	1,115	620	310	59	44
5	8.10	1	1,225	665	345	64	54	38	8.10	2	1,156	625	305	69	47
7	8.11	3	1,298	682	343	61	56	39	8.3	3	1,287	685	350	60	58
9	8.8	4	1,370	750	366	61	69	40	8.1	2	1,137	635	295	58	49
10	8.1	3	1,153	622	313	56	40	41	8.9	4	1,276	670	330	64	65
11	8.5	4	1,278	672	350	62	57	42	8.8	3	1,283	670	345	59	51
13	8.2	2	1,220	654	327	61	50	43	8.8	2	1,269	675	330	64	64
14	8.4	2	1,182	645	330	59	49	44	8.4	3	1,220	630	305	60	51
15	8.6	2	1,240	650	331	58	49	45	8.3	3	1,194	630	330	59	40
16	8.5	2	1,180	635	315	55	50	46	8.9	3	1,322	705	355	62	58
17	8.2	2	1,242	671	342	62	52	47	8.6	2	1,149	655	285	57	56
19	8.1	2	1,217	662	328	59	55	49	8.1	3	1,131	625	305	59	44
20	8.11	4	1,301	685	355	64	55	50	8.11	3	1,275	680	335	64	58
21	8.8	4	1,301	710	335	61	69	51	8.5	3	1,254	700	350	66	60
22	8.6	4	1,265	710	330	66	56	52	8.9	3	1,214	650	325	59	49
23	8.8	3	1,243	660	335	65	55	54	8.9	2	1,162	630	310	56	44
24	8.10	3	1,270	770	335	62	62	56	8.5	4	1,297	690	350	61	57
25	8.2	2	1,260	670	340	60	50	57	8.5	3	1,222	670	315	59	45
26	8.9	3	1,269	680	330	60	62	58	8.1	3	1,148	630	295	58	47
27	8.8	2	1,137	665	300	58	46	59	8.3	3	1,234	655	325	57	47
28	8.8	3	1,244	775	325	60	54	63	8.3	2	1,257	680	325	62	56
29	8.0	2	1,387	735	365	60	91	65	8.10	4	1,307	680	340	63	56
30	8.6	2	1,159	625	315	58	43	66	8.4	2	1,246	660	320	61	50
32	8.5	2	1,196	635	320	58	44	67	8.9	2	1,165	640	315	58	45
34	8.4	2	1,199	640	325	60	54	68	8.5	2	1,172	630	330	56	47

Number in 6-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 6-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
43	8.1	2	1,216	620	320	61	46	55	8.10	1	1,196	640	310	60	46
48	8.0	3	1,160	645	315	58	44								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
84	1,156	95	132	59	96	96		98	141	59	98
85		100	152	61	97	97	1,284	96	157	61	96
86		94	142	61	98	98	1,288	100	148	61	100
87		102	150	61	99	99	1,242	100	138	61	100
88		93	156	61	100	100		89	150	61	89
89		94	154	61	101	101		96	150	61	96
90		94	144	61	102	102		91	144	64	91
91		92	154	61	103	103		89	144	66	89
92		92	159	61	104	104		98	162	56	98
93		95	141	61	105	105		93	154	61	93
94		103	143	60	106	106		89	142	60	89
95		103	149	64							

9-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	9.8	-----	1	1,286	687	166	143	117	62	l. br.	bl.	-----	-----
2	9.9	-----	2	1,534	704	163	134	114	58	d. br.	d. br.	1	2
3	9.8	4	2	1,302	674	183	144	118	54	red.	bl.	1	-----
4	9.1	-----	3	1,257	657	179	144	115	53	blo.	gr.	2	1
5	9.3	-----	3	1,298	698	199	131	119	60	br.	gr.	1	3
6	9.11	-----	3	1,380	726	183	150	125	72	red.	gr.	-----	-----
7	9.0	4	2	1,329	687	185	137	117	62	br.	bl.	1	1
8	9.11	4	6	1,242	679	169	140	109	52	blo.	gr.	1	7
9	9.4	-----	3	1,352	717	182	140	121	70	d. br.	l. br.	1	2
10	9.8	-----	3	1,246	675	176	143	110	53	br.	g. bl.	3	1
11	9.7	4	2	1,290	672	174	147	116	54	br.	br.	2	-----
12	9.1	4	1	1,296	709	171	148	125	69	br.	gr.	-----	-----
13	9.8	3	1	1,299	677	179	137	120	59	br.	l. br.	-----	-----
14	9.2	3	1	1,151	631	162	141	117	44	d. br.	d. br.	-----	-----
15	9.6	3	4	1,351	736	182	139	116	71	l. br.	bl.	1	3
16	9.8	-----	2	1,305	696	178	137	113	62	br.	br.	2	-----
17	9.5	-----	3	1,243	683	181	142	115	62	br.	g. bl.	3	1
18	9.1	3	1	1,168	635	177	143	116	55	l. br.	bl.	1	1
19	9.10	3	2	1,145	606	169	136	113	41	bio.	bl.	-----	1
20	9.6	-----	3	1,243	656	164	134	113	51	blo.	bl.	1	1
21	9.1	-----	2	1,363	751	175	147	124	90	l. br.	g. bl.	1	-----
22	9.0	-----	1	1,194	643	172	135	116	42	br.	l. br.	-----	-----
23	9.3	-----	1	1,198	646	170	141	116	50	br.	bl.	1	-----
24	9.2	-----	2	1,227	658	171	144	120	50	blo.	g. bl.	1	-----
25	9.1	-----	1	1,273	676	173	137	115	57	br.	d. br.	1	-----
26	9.9	2	5	1,262	674	171	130	109	56	br.	bl.	3	1
27	9.0	-----	7	1,281	707	178	139	117	64	br.	bl.	3	3
28	9.4	2	2	1,156	655	183	151	112	49	blo.	gr.	2	1
29	9.9	-----	5	1,263	687	173	128	117	61	black.	d. br.	2	2
30	9.7	4	3	1,249	660	181	146	119	55	d. blo.	gr.	2	-----
31	9.9	4	2	1,265	645	174	147	114	52	d. blo.	gr.	1	3
32	9.11	3	5	1,258	650	176	141	118	62	br.	g. br.	2	3
33	9.5	2	4	1,266	682	178	143	117	62	d. br.	bl.	3	3
34	9.3	2	2	1,283	662	173	142	120	58	br.	bl.	1	-----
35	9.6	4	1	1,321	685	182	144	121	63	blo.	bl.	-----	-----
36	9.9	4	3	1,292	700	184	139	116	68	br.	gr.	-----	3
37	9.8	4	2	1,290	695	170	139	117	55	blo.	bl.	1	2
38	9.10	4	1	1,253	664	178	142	126?	49	blo.	bl.	1	-----
39	9.1	3	1	1,328	677	187	150	127	68	br.	br.	2	2
40	9.1	2	9	1,296	710	172	143	118	55	blo.	bl.	6	4
41	9.2	2	2	1,125	631	172	135	114	40	br.	d. br.	3	-----
42	9.4	2	a 3	1,276	709	176	145	126	58	br.	bl.	3	4
43	9.11	2	3	1,291	688	168	132	111	51	l. br.	gr.	3	5
44	9.7	4	9	1,401	757	179	141	121	80	d. blo.	bl.	4	5
45	9.8	4	1	1,343	717	175	148	125	63	d. br.	bl.	3	1
46	9.9	4	4	1,364	691	182	144	125	64	red.	bl.	3	1
47	9.4	4	1	1,252	678	177	142	117	59	br.	gr.	-----	-----
48	9.4	4	3	1,282	692	184	139	115	78	d. br.	bl.	2	1
49	9.0	4	1	1,356	715	171	130	115	57	d. br.	bl.	-----	-----
50	9.5	4	3	1,402	742	182	138	119	79	d. br.	br.	1	1
51	9.3	-----	2	1,333	711	177	138	115	65	blo.	bl.	2	1
52	9.9	-----	3	1,245	697	172	145	114	55	blo.	bl.	-----	2
53	9.2	3	1	1,258	679	181	143	112	52	blo.	bl.	1	-----
54	9.8	4	7	1,308	695	177	143	117	63	d. br.	bl.	2	5
55	9.7	4	1	1,222	652	182	139	117	56	br.	bl.	-----	-----
56	9.9	4	2	1,272	661	176	144	119	64	br.	g. bl.	2	1
57	9.11	4	3	1,328	703	182	141	120	62	br.	bl.	2	3
58	9.8	3	1	1,227	662	171	143	118	50	br.	bl.	2	2
59	9.4	3	2	1,235	693	177	140	116	59	l. br.	bl.	-----	1
60	9.7	3	1	1,195	656	179	142	118	49	br.	gr.	-----	-----
61	9.0	2	3	1,225	675	178	142	117	58	l. br.	gr.	1	1
62	9.7	1	15	1,156	641	165	129	110	46	br.	br.	4	12
63	9.10	5	4	1,245	674	181	145	114	54	br.	bl.	3	2
64	9.1	4	2	1,321	673	176	145	115	57	br.	bl.	-----	1
65	9.0	4	4	1,253	658	177	134	114	53	blo.	bl.	3	-----
66	9.4	4	2	1,341	703	193	141	122	73	br.	g. bl.	1	1
67	9.6	3	2	1,293	672	177	136	112	58	blo.	-----	2	-----
68	9.3	3	4	1,243	665	175	136	114	52	l. br.	g. bl.	1	3
69	9.3	2	3	1,208	612	171	138	112	48	br.	br.	3	-----
70	9.2	2	1	1,250	674	181	146	120	51	br.	br.	-----	-----
71	9.11	4	4	1,260	660	167	137	116	49	br.	br.	6	2
72	9.5	4	6	1,244	693	172	137	112	55	br.	br.	3	2
73	9.7	4	2	1,170	626	162	136	118	45	d. br.	d. br.	4	1
74	9.8	4	8	1,258	720	181	139	120	65	br.	br.	4	3
75	9.8	4	1	1,265	650	177	143	120	52	blo.	g. bl.	-----	1
76	9.8	4	1	1,277	685	179	143	122	55	br.	bl.	-----	1
77	9.0	4	2	1,392	733	180	145	130	80	d. br.	d. br.	1	2

*Twin sister.

9-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
78.....	9.0	4	8	1,203	635	172	139	116	48	red br	gr.	3	5
79.....	9.3	3	3	1,245	657	186	141	119	57	blo.	bl.	1	1
80.....	9.6	3	2	1,211	634	177	142	120	51	d. blo.	bl.	2	2
81.....	9.1	3	1	1,255	655	173	138	124	52	d. br.	d. br.	1	2
82.....	9.2	3	1	1,312	690	170	133	118	55	br.	br.	2	2
83.....	9.6	3	1	1,268	686	171	142	119	53	br.	br.	3	3
84.....	9.10	6	6	1,314	699	173	142	118	72	d. br.	bl.	3	3
85.....	9.3	3	1	1,135	625	177	145	109	46	br.	g. br.	1	1
86.....	9.9	2	4	1,194	651	177	140	111	49	br.	bl.	1	1
87.....	9.7	2	4	1,229	680	157	130	110	49	d. br.	d. gr.	1	2
88.....	9.0	2	2	1,257	675	176	136	115	54	br.	gr.	3	1
89.....	9.9	1	1	1,287	734	169	139	108	60	d. br.	bl.	3	1
90.....	9.4	1	3	1,310	685	175	145	122	65	br.	gr.	3	3
91.....	9.6	4	4	1,327	.....	181	143	116	.....	d. blo.	bl.	2	2
92.....	9.11	4	3	1,265	.....	169	132	118	.....	d. br.	bl.	1	2
93.....	9.2	4	1	1,277	.....	177	141	121	.....	d. br.	l. br.	.....	1
94.....	9.3	4	2	1,255	.....	169	132	118	.....	l. br.	l. br.	2	1
95.....	9.6	3	1	1,213	.....	164	138	112	.....	d. br.	bl.	3	1
96.....	9.7	3	1	1,221	.....	171	130	113	.....	red.	bl.	1	1
97.....	9.5	4	4	1,257	.....	173	142	120	.....	d. br.	d. br.	1	3
98.....	9.5	4	4	1,276	.....	186	146	118	.....	l. br.	gr.	2	3
99.....	9.5	3	1	1,285	.....	170	149	121	.....	d. br.	gr.	1	1
100.....	9.11	2	.....	1,191	.....	187	131	110	.....	d. br.	b. gr.	.....	.....
101.....	9.6	1	a 4	1,186	.....	178	137	113	.....	l. br.	d. br.	4	4
102.....	9.9	4	3	1,280	.....	187	141	123	.....	d. br.	d. br.	3	2
103.....	9.2	4	4	1,247	656	173	140	109	.....	d. br.	d. br.	3	1
104.....	9.10	4	1	1,251	681	181	143	118	.....	l. br.	l. br.	1	.....
105.....	9.11	4	4	1,284	695	173	142	120	.....	blo.	bl.	4	.....
106.....	9.9	4	12	1,245	688	175	141	112	.....	d. br.	gr.	4	3
107.....	9.11	4	4	1,322	700	.....	186	146	118	l. br.	bl.	1	1
108.....	9.4	4	2	1,280	.....	182	139	120	.....	d. br.	gr.	4	.....
109.....	9.3	4	3	1,211	.....	182	140	111	.....	d. br.	l. br.	1	.....
110.....	9.10	4	4	1,245	.....	173	141	119	.....	l. br.	bl.	1	2
111.....	9.5	4	4	1,275	.....	176	138	117	.....	d. blo.	bl.	4	3
112.....	9.4	4	4	1,291	.....	177	135	116	.....	d. blo.	bl.	1	.....
113.....	9.5	5	1	1,238	.....	173	141	120	.....	l. br.	g. br.	.....	.....
114.....	9.5	3	1	1,308	.....	176	142	118	.....	l. br.	l. br.	3	.....
115.....	9.11	3	1	1,378	.....	187	138	114	.....	d. br.	bl.	.....	.....
116.....	9.2	3	2	1,276	.....	166	141	116	.....	l. br.	g. bl.	1	1
117.....	9.7	3	3	1,296	.....	177	132	112	.....	d. br.	d. br.	3	2

a Twin.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
118.....	9.7	3	1,296	695	330	61	65	119.....	9.9	4	1,295	675	350	60	61

REPEATED MEASUREMENTS.

Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
2.....	9.9	5	1,282	672	350	63	58	16.....	9.3	2	1,290	685	345	61	56
3.....	9.10	5	1,300	712	325	61	57	18.....	9.1	2	1,160	640	315	54	51
4.....	9.6	4	1,247	678	316	64	55	19.....	9.2	3	1,186	660	315	60	56
6.....	9.5	4	1,305	702	333	62	61	21.....	9.0	2	1,299	698	330	58	60
7.....	9.6	3	1,281	685	350	64	56	23.....	9.11	4	1,285	690	345	60	51
8.....	9.8	3	1,243	660	350	62	57	24.....	9.9	4	1,318	695	345	68	59
9.....	9.9	3	1,262	685	320	61	59	25.....	9.6	4	1,292	695	350	69	60
10.....	9.5	3	1,233	648	330	60	49	28.....	9.4	3	1,289	695	360	69	57
12.....	9.9	2	1,282	680	355	63	58	29.....	9.0	3	1,286	690	345	61	60
13.....	9.9	3	1,295	690	350	62	62	30.....	9.4	3	1,304	710	335	63	56
14.....	9.1	3	1,354	720	375	66	63	31.....	9.7	3	1,254	641	447	64	56
15.....	9.9	2	1,246	670	335	58	52	32.....	9.6	3	1,245	760	335	58	49

9-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS—Continued.

Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
33	9.3	3	1,212	640	320	62	48	58	9.7	4	1,255	695	340	62	60
35	9.3	4	1,315	670	330	63	51	59	9.3	4	1,140	610	330	59	56
40	9.5	4	1,348	650	340	59	43	60	9.2	3	1,272	690	330	59	60
42	9.3	4	1,328	700	350	67	75	61	9.11	5	1,284	695	325	60	49
43	9.7	4	1,316	680	330	63	36	62	9.7	4	1,265	705	345	61	60
45	9.3	4	1,182	630	320	58	36	64	9.5	4	1,235	640	325	60	51
46	9.11	4	1,334	700	360	66	77	65	9.1	4	1,296	670	340	60	65
47	9.1	4	1,346	685	355	64	61	66	9.3	4	1,226	655	325	60	48
49	9.1	4	1,354	650	340	66	56	67	9.1	4	1,285	660	325	61	56
50	9.8	4	1,312	710	355	63	63	68	9.3	4	1,240	700	350	64	58
54	9.0	4	1,332	690	340	63	56	69	9.4	4	1,208	670	325	63	52
55	9.3	4	1,352	670	330	63	53	71	9.1	4	1,503	695	350	63	61
56	9.6	4	1,303	685	340	63	53	72	9.3	4	1,166	610	315	54	44
57	9.0	4	1,318	695	355	71	64	75	9.6	3	1,400	750	433	69	77

Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 7-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
18	9.0	3	1,233	667	333	62	55	62	9.0	3	1,214	645	330	61	53
61	9.0	3	1,275	715	320	62	62								

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
89	1,305	89				104	1,230	95	158		
90	1,368	94				105	1,270	100	147		
91		101	159			106	1,230	92	141		
92		105	154			107	1,311	108	156		
93		96	152			108		99	159	64	
94		95	143			109		98	148	60	
95		98	147			110		98	147	63	
96		96	144			111		91	139	64	
97		97	147			112		94	150	63	
98		101	154			113		95	159	66	
99		102	146			114		96	149	65	335
100		104	147	53		115		95	151	67	365
101		91	152	57		116		101	158	65	340
102		100	166	64		117		94	140	59	335
103	1,230	91	144			3 (8-yr. series)		103	164	61	325

10-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	10.2	6	5	1,450	778	181	146	118	79	blo.	gr.	4	1
2	10.5	6	2	1,353	690	180	136	117	67	br.	bl.		1
3	10.10		1	1,450	758	190	140	122	76	br.	d. br.		
4	10.8	6	4	1,380	710	181	145	120	60	l. br.	g. bl.	1	1
5	10.11	6	2	1,431	773	188	145	118	76	l. br.	g. bl.		1
6	10.9	6	4	1,254	700	174	147	120	61	br.	g. gr.	2	1
7	10.3		4	1,314	696	173	142	120	62	blo.	g. bl.	1	3
8	10.5	5	3	1,268	679	174	133	111	50	d. br.	g. gr.		2
9	10.6		4	1,323	703	177	139	116	72	blo.	g. bl.	1	4
10	10.9	5	5	1,398	737	169	141	120	73	d. br.	g. bl.	2	2
11	10.6		1	1,342	712	182	147	121	61	br.	g. bl.	1	1
12	10.8		2	1,368	734	170	145	119	77	d. br.	bl.		1
13	10.10		2	1,342	706	182	146	123	68	l. br.	g. bl.	2	
14	10.11		2	1,327	701	176	138	119	59	br.	g. bl.	1	
15	10.0	5	3	1,229	675	178	152	119	58	d. br.	br.	1	2

10-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	H eight sitting.	L ength of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
16	10.6	-----	1	1,325	689	167	141	122	60	blo.	d. br.	-----	-----
17	10.8	4	1	1,280	676	181	140	114	53	gr.	gr.	1	-----
18	10.8	4	4	1,359	717	175	147	117	66	d. br.	d. br.	2	1
19	10.7	3	3	1,246	679	191	146	118	62	d. br.	d. br.	1	2
20	10.4	-----	2	1,223	650	173	139	113	56	d. br.	gr.	1	3
21	10.0	4	4	1,293	689	181	140	114	65	br.	bl.	3	2
22	10.7	-----	3	1,468	790	187	147	122	122	br.	bl.	1	3
23	10.9	4	4	1,381	759	177	146	117	73	blo.	bl.	3	6
24	10.4	4	1	1,321	694	179	138	116	61	br.	gr.	1	1
25	10.0	4	1	1,370	712	192	148	128	71	blo.	bl.	1	1
26	10.3	-----	1	1,263	682	175	140	115	59	br.	bl.	a1	-----
27	10.7	-----	1	1,295	694	180	138	119	61	br.	d. br.	1	2
28	10.5	4	2	1,300	697	175	140	118	59	br.	bl.	-----	1
29	10.9	-----	1	1,365	732	180	142	118	64	d. br.	g. bl.	2	-----
30	10.11	6	3	1,365	735	170	144	123	67	br.	bl.	-----	2
31	10.6	6	2	1,322	681	174	150	123	66	l. br.	bl.	1	-----
32	10.6	4	1	1,370	720	184	147	121	71	blo.	br.	1	-----
33	10.8	4	2	1,499	742	177	144	123	87	br.	gr.	1	-----
34	10.11	6	3	1,396	744	178	141	120	73	br.	l. br.	2	1
35	10.6	6	1	1,497	769	177	145	123	70	br.	gr.	1	1
36	10.9	6	1	1,349	711	182	141	121	61	d. blo.	l. br.	1	2
37	10.11	5	2	1,402	725	177	137	121	73	br.	gr.	-----	1
38	10.2	5	1	1,269	687	179	141	118	50	br.	br.	-----	-----
39	10.11	3	1	1,385	686	177	136	116	61	l. br.	gr.	1	2
40	10.2	4	1	1,230	711	173	144	116	56	blo.	bl.	3	1
41	10.3	5	1	1,333	704	169	142	116	55	br.	bl.	2	4
42	10.6	4	6	1,227	655	178	139	116	50	br.	br.	2	3
43	10.7	4	5	1,227	665	173	141	116	56	br.	bl.	4	2
44	10.6	4	2	1,391	739	189	146	132	82	d. blo.	gr.	3	1
45	10.3	4	3	1,322	759	181	145	126	67	br.	gr.	3	5
46	10.7	2	5	1,321	724	170	134	118	67	br.	gr.	2	2
47	10.0	6	2	1,285	693	172	149	122	62	br.	bl.	2	1
48	10.9	6	1	1,441	766	184	138	118	82	br.	bl.	-----	-----
49	10.3	5	3	1,243	669	170	139	117	53	br.	l. br.	1	1
50	10.3	-----	7	1,293	690	181	150	121	63	br.	l. br.	4	2
51	10.5	5	1	1,385	756	186	142	120	69	br.	br.	2	-----
52	10.8	5	10	1,182	619	172	136	106	40	br.	gr.	7	5
53	10.8	4	2	1,403	731	182	147	127	74	d. br.	g. bl.	1	2
54	10.6	4	4	1,341	705	176	137	112	55	d. br.	bl.	2	4
55	10.5	4	6	1,261	680	180	145	118	60	d. blo.	g. bl.	4	1
56	10.9	4	6	1,345	752	179	147	121	81	d. br.	g. bl.	3	3
57	10.0	4	1	1,395	749	179	142	118	72	d. br.	bl.	1	-----
58	10.0	2	2	1,254	669	165	139	116	51	rd. br.	bl.	4	3
59	10.9	6	4	1,322	729	175	145	118	66	rd. br.	bl.	5	3
60	10.7	5	2	1,284	685	173	144	119	59	d. br.	bl.	2	1
61	10.0	4	4	1,225	663	170	152	120	53	d. br.	d. br.	2	3
62	10.8	4	1	1,310	663	180	144	124	66	br.	bl.	-----	1
63	10.8	4	2	1,324	726	180	148	120	65	bla.	gr.	-----	1
64	10.0	4	5	1,376	665	173	136	115	72	d. br.	gr.	2	1
65	10.10	3	4	1,304	709	173	133	112	57	br.	bl.	3	-----
66	10.2	3	9	1,305	704	174	137	112	59	d. br.	bl.	5	6
67	10.0	3	1	1,276	667	180	143	119	55	d. br.	d. br.	-----	-----
68	10.1	2	7	1,219	668	177	145	117	54	d. br.	gr.	1	6
69	10.5	2	5	1,293	698	172	132	119	59	d. br.	d. br.	1	-----
70	10.11	6	5	1,423	727	179	142	123	65	br.	bl.	4	3
71	10.11	5	1	1,371	682	167	147	120	64	l. blo.	bl.	-----	-----
72	10.1	5	1	1,302	694	172	135	115	52	br.	gr.	-----	-----
73	10.3	5	3	1,272	678	176	138	111	52	blo.	bl.	-----	2
74	10.6	5	2	1,382	716	180	142	121	66	blo.	g. bl.	-----	1
75	10.6	5	3	1,363	704	185	140	111	65	d. blo.	l. br.	-----	4
76	10.5	5	4	1,273	698	179	141	116	55	br.	br.	1	3
77	10.7	5	1	1,356	692	179	147	123	66	d. br.	d. br.	-----	-----
78	10.8	5	1	1,419	707	175	145	121	60	d. br.	d. br.	3	3
79	10.0	5	4	1,284	705	178	139	114	60	l. br.	g. bl.	3	2
80	10.0	4	1	1,343	718	173	137	120	65	l. br.	bl.	-----	-----
81	10.0	4	4	1,410	743	175	139	120	67	br.	br.	1	4
82	10.7	4	3	1,307	680	171	136	114	56	rd. br.	bl.	2	1
83	10.5	4	2	1,352	718	180	147	123	63	br.	bl.	2	1
84	10.5	4	1	1,345	676	180	139	118	64	d. br.	g. bl.	-----	2
85	10.6	4	2	1,361	715	186	141	118	67	d. br.	bl.	1	1
86	10.9	4	2	1,349	712	186	141	118	70	br.	bl.	3	-----
87	10.10	4	4	1,271	663	176	143	114	56	rd.	br.	1	7
88	10.3	4	2	1,370	746	189	149	126	75	l. br.	bl.	1	-----
89	10.6	4	2	1,307	700	176	146	115	65	br.	br.	2	2
90	10.9	3	1	1,352	675	187	146	121	58	d. br.	bl.	1	-----
91	10.0	3	2	1,182	640	170	136	109	44	blo.	gr.	2	1
92	10.3	3	1	1,378	708	171	141	120	72	br.	bl.	1	2
93	10.3	3	1	1,252	657	171	139	110	51	br.	gr.	3	1
94	10.3	3	8	1,270	682	180	136	115	57	br.	gr.	5	2

a Half brother.

10-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
95.	10.2	3	4	1,290	698	163	140	122	60	br.	gr.	1	2
96.	10.0	3	1	1,277	648	177	134	114	56	br.	gr.		
97.	10.4	3	1	1,288	697	173	144	118	60	br.	gr.		
98.	10.1	3	2	1,185	655	166	137	107	47	d. br.	gr.		
99.	10.11	3	1	1,353	690	182	137	115	61	d. blo.	gr.		
100.	10.10	3	1	1,310	689	173	144	121	58	rd.	bl.		
101.	10.3	4	3	1,254	655	175	136	118	50	d. blo.	g. bl.		
102.	10.2	5	1	1,211	656	182	142	117	54	l. br.	l. br.		
103.	10.2	3	1	1,467	763	182	140	120	34	br.	gr.		
104.	10.9	4	2	1,343	668	175	139	118	65	br.	gr.		
105.	10.0	3	2	1,283	666	170	144	114	74	br.	br.		
106.	10.11	4	1	1,479	755	185	144	123	57	rd.	gr.		
107.	10.4	4	4	1,317	674	176	136	113	74	d. blo.	g. bl.		
108.	10.0	4	10	1,382	737	175	146	125	69	d. br.	d. br.	1	4
109.	10.9	4	4	1,322	670	182	143	118	61	br.	gr.	1	4
110.	10.6	3	4	1,270	663	177	142	112	56	br.	l. br.	1	1
111.	10.8	3	2	1,353	711	179	143	117	70	d. blo.	gr.	1	1
112.	10.2	3	2	1,331	679	176	142	115	66	d. blo.	g. bl.	2	2
113.	10.3	3	2	1,355	724	181	143	117	69	d. br.	d. br.	1	1
114.	10.4	1	7	1,303	691	173	134	112	66	rd.	br.	10	2
115.	10.7	6	3	1,424	777	177	149	127	74	l. br.	bl.	2	2
116.	10.8	5	5	1,434	784	186	148	124	74	d. br.	l. br.	3	3
117.	10.5	5	5	1,394	746	176	140	118	74	d. blo.	gr.	2	2
118.	10.5	3	3	1,333	711	185	144	122	74	d. br.	d. br.	3	3
119.	10.11	1	1	1,412	773	173	154	128	74	l. br.	g. bl.	1	1
120.	10.11	5	4	1,435	789	189	149	124	74	d. blo.	gr.	1	3
121.	10.7	1	1	1,410	779	179	142	122	74	d. br.	d. br.	1	3
122.	10.11	4	3	1,303	772	172	138	115	74	d. br.	d. br.	3	3
123.	10.6	4	4	1,387	737	173	143	122	74	l. br.	bl.	1	1
124.	10.5	4	1	1,242	713	173	135	122	74	d. br.	bl.	2	2
125.	10.7	4	2	1,344	744	184	140	121	74	d. blo.	bl.	1	1
126.	10.0	4	2	1,365	770	170	139	121	74	d. blo.	l. br.	1	2
127.	10.8	3	2	1,387	786	186	142	118	74	blo.	bl.	1	2
128.	10.0	3	3	1,266	716	176	141	117	74	d. br.	bl.	5	3
129.	10.3	4	1	1,332	780	180	140	112	74	l. br.	bl.	7	4
130.	10.2	4	6	1,280	791	191	146	119	74	l. br.	bl.	4	3
131.	10.5	4	6	1,264	763	163	144	123	74	l. br.	bl.	4	3
132.	10.0	1	6	1,244	782	182	146	119	74	blo.	bl.	4	3
133.	10.6	4	4	1,244	772	172	145	113	74	l. br.	bl.	4	3
134.	10.2	4	5	1,366	745	184	142	120	74	d. br.	d. br.	2	2
135.	10.11	4	6	1,421	762	186	145	115	74	d. br.	g. bl.	2	2
136.	10.1	4	6	1,334	698	180	147	123	74	l. br.	bl.	2	2
137.	10.4	4	1	1,353	773	173	142	118	74	d. blo.	bl.	1	1
138.	10.6	4	1	1,298	787	187	140	118	74	d. br.	bl.	1	2
139.	10.0	4	1	1,318	774	174	140	119	74	d. br.	d. br.	1	2
140.	10.2	4	1	1,287	783	183	139	118	74	blo.	bl.	1	7
141.	10.7	4	4	1,342	783	183	154	131	74	d. br.	gr.	2	2
142.	10.1	5	4	1,262	782	182	142	118	74	d. blo.	gr.	1	2
143.	10.2	5	5	1,325	782	182	140	117	74	d. br.	d. br.	3	2
144.	10.11	5	5	1,413	780	180	151	125	74	d. br.	gr.	5	4
145.	10.4	5	3	1,325	784	184	154	123	74	d. br.	bl.	4	4
146.	10.2	3	3	1,250	776	176	147	131	74	l. br.	d. br.	4	5
147.	10.5	3	3	1,276	775	175	138	113	74	l. br.	gr.	1	2
148.	10.11	6	3	1,306	781	181	138	119	74	blo.	l. br.	2	3
149.	10.10	6	6	1,405	784	184	140	120	74	d. blo.	gr.	3	3
150.	10.10	6	6	1,351	773	173	138	115	74	l. br.	l. br.	1	2
151.	10.3	4	3	1,290	782	182	143	123	74	d. br.	bl.	3	3
152.	10.3	4	3	1,285	784	184	149	127	74	d. br.	d. br.	3	3
153.	10.9	4	3	1,385	786	186	136	118	74	d. br.	gr.	2	2
154.	10.0	5	1	1,325	772	172	141	116	74	d. br.	d. br.	1	2
155.	10.4	3	1	1,224	772	172	140	117	74	d. br.	d. br.	1	1
156.	10.4	3	1	1,270	785	185	134	118	74	bla.	l. br.	1	1
157.	10.3	3	2	1,414	770	185	134	118	74	d. br.	bl.	2	1
158.	10.3	3	2	1,360	770	170	142	119	74	d. br.	bl.	2	1
159.	10.2	3	1	1,288	775	175	134	114	74	d. blo.	gr.	2	2

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
160.	10.9	4	1,276	692	348	66	56	162.	10.1	4	1,227	650	335	58	50
161.	10.7	5	1,300	665	335	60	54								

10-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1	10.8	6	1,335	705	353	66	70	41	10.3		1,174	635	305	58	45
2	10.9	6	1,401	746	380	71	66	42	10.4		1,311	715	340	65	66
4	10.1	5	1,301	678	350	62	60	44	10.2		1,484	800	390	75	98
5	10.3	5	1,352	712	377	70	65	47	10.5	5	1,292	695	330	67	62
6	10.11	5	1,438	770	410	71	88	49	10.11	5	1,432	755	380	65	65
7	10.0	5	1,397	738	365	65	67	51	10.4	4	1,393	730	370	68	69
9	10.4	5	1,415	732	370	65	73	53	10.4	4	1,320	700	335	64	58
11	10.6	5	1,358	714	355	66	59	54	10.8	5	1,367	725	370	70	71
12	10.1	5	1,308	738	373	68	81	55	10.7	5	1,287	680	350	61	65
13	10.9	4	1,305	708	365	66	68	56	10.10	5	1,322	685	345	63	71
16	10.8	4	1,353	712	350	63	65	57	10.11	5	1,386	730	390	65	66
21	10.1	4	1,442	773	412	73	109	58	10.8	3	1,277	680	335	66	55
22	9.11	3	1,229	650	330	60	46	59	10.4	4	1,344	700	355	67	64
24	10.1	3	1,267	670	350	64	54	63	10.9	5	1,298	700	335	63	57
25	10.2	2	1,320	700	370	66	63	72	10.6	4	1,310	715	340	68	63
26	10.7	3	1,319	695	360	65	61	73	10.7	4	1,232	660	350	65	51
27	10.0	3	1,345	740	385	72	73	74	10.8	5	1,362	760	345	68	74
31	10.3	5	1,323	695	350	61	59	75	10.9	5	1,302	685	350	65	55
32	10.9	4	1,319	685	340	63	69	76	10.10	5	1,326	700	355	62	63
33	10.4	3	1,312	710	350	63	67	77	10.1	4	1,456	750	390	67	96
34	10.4	3	1,350	730	345	63	63	80	10.7	4	1,253	705	325	66	56
35	10.6	5	1,386	720	370	67	69	82	10.2	4	1,363	725	355	64	75
36	10.9	5	1,345	735	365	67	79	83	10.6	4	1,324	690	360	67	58
37	10.5	5	1,348	710	350	66	60	85	10.4	4	1,175	645	320	59	50
38	10.10	5	1,305	675	335	64	55	87	10.6	3	1,293	700	335	60	54
39	10.2	4	1,382	710	385	75	75								

Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 8-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
22	10.0	5	1,434	740	395	70	95	36	10.0		1,265	685	330	61	51

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
114	1,381	99				141		95	149	66	
121		101	144			142		104	158	62	
122		96	142			143		91	150	65	
123		106	152			144		96	143	72	
124		87	148			145		96	146	65	
125		103	161			146		95	158	63	
126		96	155			147		91	152	61	
127		104	149			148		99	161	65	
128		104	156			149		100	158	68	
129		100	148			150		94	145	62	
130		99	165			151		97	151	65	335
131		101	151			152		99	159	72	390
132		95	151			153		100	156	67	380
133		88	134	61		154		91	148	65	365
134	1,361	102	150			155		96	148	64	360
135	1,450	101	146			156		96	154	66	345
136	1,311	105	150			157		100	161	70	415
137		91	148	63		158		106	166	61	370
138		102	154	63		159		97	163	64	340
139		94	147	64		12 (9-year series)					
140		101	151	64				102	164		

11-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	11.11	6	1	1,416	712	178	144	117	71	l. br.	bl.	---	---
2	11.8	6	4	1,346	690	177	147	118	72	blo.	bl.	3	1
3	11.11	6	1	1,381	710	174	145	122	66	blo.	gr.	---	1
4	11.4	6	4	1,448	734	178	140	122	70	br.	g. bl.	1	4
5	11.4	7 and 6	2	1,444	769	182	140	120	83	l. br.	bl.	2	---
6	11.6	---	1	1,390	721	187	145	119	76	br.	g. bl.	---	1
7	11.6	---	2	1,449	760	185	143	123	78	blo.	g. bl.	1	2
8	11.1	---	2	1,326	694	179	142	111	57	br.	bl.	1	---
9	11.10	7	---	1,400	760	173	142	121	81	l. br.	g. bl.	2	1
10	11.6	6	4	1,373	728	181	145	129	70	br.	bl.	1	2
11	11.10	6	---	1,396	730	180	141	118	67	l. br.	g. bl.	---	3
12	11.11	6	3	1,410	737	178	140	119	71	l. br.	g. bl.	1	2
13	11.6	6	1	1,400	745	184	142	120	68	br.	br.	---	---
14	11.7	6	2	1,302	692	175	154	125	65	l. br.	br.	1	2
15	11.0	6	1	1,303	697	181	135	114	62	l. br.	gr.	1	---
16	11.11	6	5	1,360	709	172	145	124	62	blo.	bl.	3	2
17	11.9	5	1	1,320	683	180	141	117	64	blo.	gr.	2	1
18	11.1	---	2	1,333	697	168	147	126	59	l. br.	g. bl.	2	---
19	11.1	5	1	1,304	667	170	140	118	65	bla.	br.	1	---
20	11.1	---	1	1,366	736	181	150	123	80	l. br.	bl.	2	1
21	11.3	5	3	1,405	716	183	141	123	79	l. br.	bl.	5	1
22	11.2	---	4	1,372	745	181	145	121	76	d. br.	d. br.	3	4
23	11.0	---	2	1,318	697	179	139	114	64	l. br.	g. bl.	2	---
24	11.2	---	2	1,417	734	178	152	124	75	br.	bl.	2	1
25	11.6	5	2	1,260	679	176	140	114	50	blo.	bl.	2	1
26	11.5	---	2	1,258	687	176	148	121	59	blo.	bl.	2	3
27	11.5	---	3	1,342	723	171	138	119	66	l. br.	br.	1	---
28	11.4	---	3	1,363	721	184	139	113	66	l. br.	gr.	---	---
29	11.6	---	2	1,289	682	174	136	114	55	l. br.	bl.	2	1
30	11.6	4	2	1,329	704	176	140	116	68	br.	bl.	3	7
31	11.10	4	2	1,363	724	188	141	115	72	br.	bl.	1	3
32	11.4	3	2	1,305	693	173	132	114	58	r. br.	d. br.	---	---
33	11.6	3	1	1,358	720	181	146	126	65	d. br.	bl.	1	2
34	11.0	4	2	1,374	717	174	138	119	75	blo.	bl.	1	3
35	11.7	4	1	1,747	808	193	151	126	101	br.	gr.	1	---
36	11.3	4	---	1,294	689	195	133	117	68	br.	br.	---	---
37	11.3	6	4	1,313	714	172	140	117	69	br.	bl.	4	1
38	11.5	6	2	1,363	722	178	140	120	64	br.	g. br.	2	2
39	11.2	6	1	1,398	729	181	140	119	81	br.	br.	---	---
40	11.4	6	1	1,342	702	179	143	113	68	blo.	g. bl.	1	---
41	11.0	4	3	1,412	760	186	142	121	75	d. blo.	g. bl.	2	4
42	11.9	5	4	1,325	742	173	146	117	63	blo.	gr.	2	5
43	11.7	5	4	1,294	665	180	143	116	59	br.	g. bl.	2	2
44	11.3	5	1	1,382	727	168	132	117	65	d. blo.	gr.	3	1
45	11.6	5	1	1,331	682	177	145	115	61	br.	br.	1	2
46	11.7	5	4	1,433	729	192	153	125	74	red.	gr.	3	1
47	11.5	7	3	1,436	720	178	150	122	68	d. blo.	g. bl.	---	1
48	11.1	5	1	1,419	762	187	144	126	78	d. br.	br.	1	2
49	11.2	5	2	1,333	762	181	136	115	65	br.	bl.	---	1
50	11.2	5	1	1,396	742	170	143	118	66	br.	br.	---	---
51	11.6	5	1	1,324	723	189	143	124	65	blo.	bl.	1	---
52	11.11	5	5	1,356	724	171	135	121	78	br.	bl.	3	4
53	11.4	4	2	1,473	767	179	149	128	93	br.	bl.	---	1
54	11.1	4	5	1,287	686	168	135	111	57	d. br.	br.	5	3
55	11.11	3	3	1,456	784	179	141	124	86	d. br.	br.	3	6
56	11.6	6	3	1,478	801	177	142	121	89	br.	d. br.	2	---
57	11.1	6	3	1,321	694	165	140	118	69	d. br.	gr.	3	---
58	11.10	6	1	1,397	733	174	142	122	70	d. br.	d. br.	1	3
59	11.5	5	2	1,355	729	181	142	120	66	d. blo.	bl.	2	---
60	11.2	5	1	1,314	711	174	144	115	57	d. br.	bl.	2	1
61	11.4	5	5	1,273	698	173	140	115	56	d. blo.	bl.	4	---
62	11.11	5	2	1,432	776	184	150	125	100	l. br.	bl.	---	2
63	11.4	4	1	1,410	772	176	136	118	72	br.	bl.	---	---
64	11.10	4	2	1,258	664	177	141	115	51	l. br.	br.	3	---
65	11.10	4	2	1,440	761	181	141	122	81	d. blo.	gr.	---	1
66	11.8	4	10	1,431	774	174	140	125	73	br.	gr.	5	4
67	11.3	4	2	1,431	793	170	134	119	81	d. br.	bl.	1	---
68	11.0	4	2	1,330	692	176	146	116	57	br.	l. br.	1	3
69	11.4	4	3	1,292	681	173	140	111	53	l. br.	bl.	1	2
70	11.7	7	2	1,362	710	176	140	120	72	br.	bl.	2	1
71	11.8	6	1	1,442	769	183	144	121	72	br.	bl.	---	2
72	11.9	6	2	1,330	699	179	137	118	59	br.	br.	2	---
73	11.7	6	2	1,418	728	176	130	115	72	d. br.	d. br.	1	---
74	11.10	6	4	1,333	708	178	147	122	63	br.	bl.	3	1
75	11.0	6	3	1,380	750	177	145	122	70	d. br.	bl.	2	2
76	11.11	6	1	1,602	843	181	144	127	128	d. br.	bl.	---	1
77	11.3	5	9	1,400	735	184	145	119	65	d. br.	bl.	5	4
78	11.9	7	8	1,370	714	189	145	122	65	d. br.	gr.	4	3

11-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
79.....	11.10	5	3	1,327	705	176	141	120	60	br.	bl.	---	2
80.....	11.8	5	4	1,423	719	174	134	113	67	bla.	bl.	2	1
81.....	11.10	5	1	1,507	793	183	150	129	97	red.	bl.	---	1
82.....	11.6	4	4	1,374	757	180	144	118	64	br.	gr.	4	4
83.....	11.1	4	2	1,362	695	175	138	116	67	blo.	br.	1	---
84.....	11.8	4	1	1,264	681	174	140	113	57	br.	bl.	1	---
85.....	11.0	3	5	1,312	716	177	137	119	61	br.	bl.	3	5
86.....	11.3	3	3	1,316	698	175	147	117	58	br.	br.	3	---
87.....	11.1	3	12	1,330	731	173	141	118	74	d. br.	bl.	6	5
88.....	11.1	2	3	1,330	721	169	144	120	62	br.	bl.	4	3
89.....	11.7	8	1	1,475	739	180	139	124	73	l. br.	l. br.	2	1
90.....	11.11	7	5	1,311	718	177	149	117	61	br.	gr.	2	1
91.....	11.9	6	3	1,361	704	183	144	121	68	l. blo.	gr.	---	2
92.....	11.4	5	1	1,380	742	186	145	119	63	l. br.	gr.	---	---
93.....	11.2	5	1	1,492	778	189	145	124	109	blo.	gr.	---	1
94.....	11.3	4	4	1,373	715	177	146	125	61	br.	g. bl.	1	2
95.....	11.9	6	1	1,396	725	184	150	128	75	br.	gr.	1	---
96.....	11.6	6	1	1,420	717	180	148	124	78	br.	g. bl.	---	1
97.....	11.2	6	1	1,392	728	179	146	128	60	red.	bl.	2	1
98.....	11.3	5	1	1,369	712	170	138	117	64	blo.	bl.	---	1
99.....	11.5	5	3	1,384	731	180	142	121	81	d. blo.	bl.	1	1
100.....	11.9	5	13	1,320	707	180	153	125	67	br.	br.	5	8
101.....	11.10	5	3	1,322	694	179	135	117	57	l. br.	g. bl.	1	1
102.....	11.8	5	4	1,362	741	175	144	112	60	gold.	g. bl.	3	---
103.....	11.8	5	3	1,412	746	183	132	120	73	l. br.	bl.	3	---
104.....	11.1	5	5	1,440	756	176	141	119	77	d. br.	d. br.	4	2
105.....	11.0	5	2	1,439	751	190	144	123	82	br.	gr.	---	---
106.....	11.0	5	1	1,332	733	176	140	117	68	d. br.	g. bl.	1	1
107.....	11.0	5	1	1,434	746	178	141	122	81	l. br.	gr.	---	1
108.....	11.0	4	3	1,350	708	179	147	120	70	d. br.	gr.	1	2
109.....	11.0	4	1	1,390	732	183	135	114	65	br.	br.	3	1
110.....	11.0	4	1	1,302	684	181	136	118	57	br.	bl.	---	2
111.....	11.0	4	3	1,261	665	176	142	122	61	d. br.	bl.	2	2
112.....	11.0	4	1	1,325	688	175	142	119	79	br.	bl.	1	---
113.....	11.6	4	6	1,388	731	187	141	123	68	br.	bl.	2	4
114.....	11.11	3	1	1,302	694	178	143	117	64	br.	bl.	3	2
115.....	11.0	3	6	1,370	745	176	135	119	81	d. br.	d. br.	---	5
116.....	11.0	3	1	1,332	714	169	145	124	68	blo.	bl.	1	---
117.....	11.3	3	3	1,340	712	173	135	111	56	br.	gr.	4	2
118.....	11.11	3	3	1,337	692	182	141	119	60	br.	bl.	---	1
119.....	11.3	6	1	1,446	---	181	139	124	---	d. blo.	bl.	2	2
120.....	11.8	5	2	1,409	---	172	150	127	---	blo.	bl.	1	2
121.....	11.0	5	3	1,336	---	170	144	116	---	d. br.	l. br.	2	3
122.....	11.2	5	2	1,345	---	174	139	121	---	blo.	bl.	2	2
123.....	11.0	5	2	1,476	---	182	135	121	---	d. br.	gr.	2	---
124.....	11.8	5	2	1,422	---	177	139	120	---	d. br.	d. br.	1	2
125.....	11.6	5	1	1,294	---	183	144	118	---	blo.	bl.	1	---
126.....	11.1	4	2	1,333	---	179	142	119	---	l. br.	bl.	1	2
127.....	11.2	3	3	1,258	---	176	135	110	---	d. br.	bl.	---	2
128.....	11.2	3	4	1,365	---	177	136	110	---	d. br.	gr.	2	1
129.....	11.3	3	6	1,290	---	172	146	118	---	d. br.	d. br.	2	3
130.....	11.4	4	2	1,319	---	183	153	120	---	d. br.	bl.	---	4
131.....	11.0	4	3	1,355	---	177	145	122	---	d. br.	g. bl.	1	1
132.....	11.6	4	4	1,294	680	177	152	136	---	d. br.	gr.	2	1
133.....	11.3	4	1	1,270	673	176	141	117	---	blo.	bl.	---	---
134.....	11.9	4	1	1,344	702	173	137	116	---	l. blo.	g. bl.	4	1
135.....	11.9	4	3	1,370	---	182	135	110	---	d. br.	l. br.	---	---
136.....	11.1	5	2	1,396	---	170	145	123	---	l. blo.	bl.	1	2
137.....	11.10	5	6	1,349	---	173	140	117	---	d. br.	d. br.	1	---
138.....	11.8	5	1	1,472	---	183	143	120	---	d. br.	gr.	4	2
139.....	11.7	6	5	1,346	---	175	142	122	---	l. br.	l. br.	1	6
140.....	11.5	6	3	1,345	---	187	142	117	---	d. blo.	bl.	2	1
141.....	11.1	6	2	1,427	---	184	151	124	---	d. br.	bl.	1	---
142.....	11.6	6	3	1,322	---	179	144	120	---	d. br.	l. br.	4	1
143.....	11.5	6	3	1,548	---	184	150	131	---	l. br.	l. br.	1	1
144.....	11.0	6	2	1,402	---	183	147	127	---	l. br.	bl.	1	3
145.....	11.1	5	4	1,310	---	175	135	120	---	d. blo.	d. br.	6	3
146.....	11.3	5	3	1,425	---	170	134	120	---	d. br.	bl.	1	1
147.....	11.11	5	2	1,465	---	185	145	120	---	d. br.	d. br.	3	2
148.....	11.8	4	2	1,459	---	174	143	121	---	d. br.	l. br.	1	---
149.....	11.6	4	2	1,327	---	177	134	113	---	d. br.	d. br.	1	1
150.....	11.1	4	2	1,339	---	171	140	115	---	d. br.	bl.	1	---

11-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
151	11.0	3	1,355	725	365	68	68	154	11.7	5	1,347	715	350	68	70
152	11.11	6	1,427	754	384	69	71	155	11.0	4	1,417	760	385	77	79
153	11.5	2	1,329	705	360	66	67								

REPEATED MEASUREMENTS.

Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
4	11.8	6	1,401	723	382	67	67	54	11.1	5	1,397	735	370	68	61
6	11.8	7	1,321	745	365	70	72	55	11.5	5	1,326	704	367	68	66
7	11.3	6	1,391	730	730	70	70	56	11.9	5	1,452	805	385	78	90
9	11.5	6	1,390	728	392	69	80	58	11.1	3	1,307	685	340	61	52
10	11.9	6	1,491	782	417	71	92	59	11.9	7	1,382	760	370	73	72
11	11.6	6	1,443	766	360	68	71	60	11.7	6	1,353	730	345	63	70
13	11.9	6	1,431	758	387	67	80	62	11.1	5	1,346	680	(?)	69	70
15	11.0	5	1,280	677	350	68	63	63	11.8	5	1,414	785	375	70	83
17	11.8	5	1,351	702	355	64	58	64	11.5	4	1,447	720	415	68	83
18	11.8	5	1,405	736	379	72	73	65	11.10	4	1,369	790	370	62	56
19	11.7	5	1,301	692	335	64	67	66	11.3	4	1,352	725	355	65	65
20	11.4	4	1,274	660	355	65	63	67	11.1	4	1,342	700	365	66	61
21	11.11	5	1,343	742	360	67	70	68	11.1	4	1,267	700	350	62	60
22	11.6	5	1,516	812	420	77	133	70	11.10	7	1,503	780	385	73	78
23	11.9	5	1,442	760	380	67	84	71	11.8	6	1,425	715	380	67	69
24	11.4	5	1,321	738	390	70	70	72	11.8	6	1,452	740	385	66	70
25	11.1	5	1,442	750	390	68	78	73	11.11	6	1,337	735	345	65	65
26	11.3	5	1,320	698	350	65	66	74	11.0	4	1,401	755	365	60	74
27	11.8	5	1,346	705	355	63	68	75	11.6	4	1,492	800	400	74	79
28	11.4	5	1,352	728	360	64	66	76	11.8	4	1,370	700	370	68	63
29	11.9	4	1,453	790	380	66	76	77	11.5	5	1,405	740	370	69	73
30	11.6	5	1,520	775	400	72	98	78	11.3	5	1,397	700	385	62	65
34	11.11	7	1,474	799	395	75	83	79	11.0	4	1,312	700	350	64	61
36	11.10	7	1,414	745	375	68	68	80	11.3	5	1,435	780	395	72	85
38	11.2	6	1,341	705	450	61	57	81	11.7	5	1,381	730	355	70	69
41	11.2	6	1,343	710	350	67	60	82	11.0	4	1,443	725	395	71	73
42	11.5	5	1,267	665	350	63	56	83	11.4	3	1,420	730	405	69	83
43	11.7	5	1,276	690	335	61	68	84	11.4	4	1,292	680	340	61	54
45	11.3	5	1,381	760	345	68	74	85	11.3	4	1,356	725	370	66	72
46	11.8	5	1,385	750	365	69	88	86	11.2	4	1,404	750	380	71	71
47	11.1	7	1,325	715	340	67	71	87	11.2	3	1,345	670	360	63	64
48	11.10	7	1,594	810	405	79	96	88	11.4	3	1,339	715	355	65	65
49	11.3	6	1,298	695	345	65	61	89	11.4	4	1,366	695	380	66	63
50	11.3	6	1,344	700	340	66	68	90	11.1	4	1,464	770	380	69	80
51	11.5	6	1,444	790	385	70	79	91	11.9	5	1,362	720	375	66	67
52	11.9	6	1,221	635	315	57	43	92	11.1	4	1,384	700	380	67	81
53	11.3	5	1,475	765	405	68	82								

Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 9-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
8	11.0	5	1,296	695	350	64	56	71	11.0	5	1,322	710	340	65	56
46	11.4	5	1,451	750	395	71	76	72	11.0	5	1,269	700	335	60	53
62	11.7	2	1,231	690	335	63	54								

11-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2)	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
124		103	157			139		94	155	67	350
125		95	148			140		97	159	68	350
126		99	156			141		102	165	69	370
127		97	155			142		102	176	73	370
128		99	147	65		143		101	168	75	370
129		96	148	63		144		97	164	68	370
130		98	160	62		145		99	156	64	370
131		95	147	67		146		106	166	71	375
132	1,310	97	153			147		109	152	72	370
133	1,261	100	147			148		103	158	70	375
134	1,306	94	154			149		95	156	61	340
135		94	153	66		150		107	161	62	370
136		100	167	74		15 (10-yr. series)		104	165		
137		99	155	64		26 (10-yr. series)		98	158		
138		103	158	68							

12-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	12.8	6	3	1,402	732	186	144	116	80	blo.	bl.	3	1
2	12.7	6	2	1,426	721	181	145	120	79	blo.	bl.	1	1
3	12.4	6	1	1,574	801	182	143	123	100	blo.	bl.	1	1
4	12.5	6	2	1,345	698	182	143	117	72	br.	br.	1	2
5	12.11	8	1	1,549	795	187	150	134	97	d. br.	l. bl.		
6	12.8	8	2	1,578	785	180	147	122	86	br.	g. bl.	2	2
7	12.3		3	1,374	729	174	140	121	68	d. br.	br.		2
8	12.8		1	1,481	744	183	145	125	78	bla.	d. br.	1	1
9	12.6	8	1	1,491	775	181	135	123	75	br.	gr.	2	
10	12.8		1	1,510	752	184	139	119	83	blo.	bl.	1	2
11	12.10		2	1,410	749	177	136	113	62	br.	br.		2
12	12.7		1	1,420	737	185	140	117	79	blo.	bl.	1	
13	12.10		2	1,395	707	177	137	118	72	br.	bl.	1	
14	12.2		3	1,668	874	181	143	126	94	br.	bl.	4	
15	12.8		2	1,471	744	182	141	118	74	br.	bl.	2	1
16	12.0		2	1,360	700	174	140	114	65	br.	br.	1	
17	12.9	7 and 6	2	1,505	774	180	144	125	88	br.	bl.	4	3
18	12.4		1	1,347	713	173	142	121	65	br.	gr.		
19	12.4	3	3	1,407	741	172	152	130	70	br.	bl.	3	1
20	12.4		1	1,463	762	176	138	124	73	blo.	bl.	1	
21	12.0	7	2	1,580	860	184	153	135	125	blo.	bl.	1	
22	12.9	6	4	1,398	761	183	140	122	73	l. br.	gr.	2	1
23	12.9	6	1	1,381	749	183	142	121	73	br.	gr.	2	2
24	12.8	6	3	1,406	763	176	148	121	68	l. br.	bl.	2	1
25	12.8	6	4	1,381	736	189	150	123	73	br.	g. bl.	1	3
26	12.4	6	1	1,420	747	185	145	124	78	d. br.	d. br.	2	1
27	12.1	6	2	1,465	748	183	140	119	77	br.	bl.	2	1
28	12.3	6	5	1,357	717	175	143	118	66	blo.	gr. br.	1	6
29	12.2		4	1,475	793	180	147	131	98	d. br.	g. bl.	1	3
30	12.1		1	1,438	746	177	153	122	74	blo.	bl.	1	
31	12.2		7	1,374	752	175	139	117	72	blo.	bl.	4	4
32	12.1	5	3	1,423	738	179	145	125	71	blo.	l. br.	1	1
33	12.2	7	4	1,507	766	177	142	119	84	br.	g. bl.	2	1
34	12.11		3	1,453	780	184	142	120	86	d. br.	g. bl.	1	1
35	12.4	5	2	1,338	779	180	144	126	80	br.	gr.	1	
36	12.0	3	3	1,406	742	177	151	124	94	blo.	g. bl.	1	1
37	12.5		2	1,337	726	175	149	122	73	blo.	g. bl.	3	3
38	12.5	9	1	1,549	804	188	149	133	106	blo.	bl.		
39	12.6	8	7	1,413	761	189	150	124	73	br.	bl.	6	2
40	12.3	6	1	1,490	730	177	144	123	68	br.	bl.		
41	12.6	6	3	1,460	777	171	148	121	80	l. br.	br.	3	5
42	12.8	4	2	1,481	791	184	141	125	93	br.	br.	1	
43	12.10	6	4	1,372	685	178	147	124	59	blo.	bl.	1	3
44	12.11	6	5	1,553	810	188	143	121	98	br.	g. bl.	5	3
45	12.5	6	3	1,337	734	178	141	116	67	br.	g. bl.	2	
46	12.0	6	1	1,435	777	180	138	124	91	br.	bl.		
47	12.2	5	3	1,532	816	175	146	127	113	br.	br.	2	1
48	12.1	5	1	1,552	847	182	142	118	93	br.	gr.		
49	12.7	5	3	1,446	795	185	135	122	81	br.	br.	1	5

12-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
50.	12.11	5	1	1.561	811	182	141	127	111	d. br.	br.	---	1
51.	12.11	5	1	1.433	725	184	138	118	71	br.	br.	1	2
52.	12.1	5	4	1.349	722	179	143	133	72	br.	l. br.	2	4
53.	12.10	5	2	1.522	796	185	147	133	96	blo.	g. bl.	1	1
54.	12.5	7	2	1.602	818	176	147	130	163	br.	gr.	---	2
55.	12.5	5	5	1.552	825	191	147	139	109	br.	br.	3	4
56.	12.5	4	13	1.322	711	174	138	117	61	d. br.	br.	3	9
57.	12.8	3	1	1.300	723	179	139	117	63	d. br.	br.	---	---
58.	12.1	3	3	1.309	703	178	139	118	63	br.	bl.	1	1
59.	12.0	7	3	1.454	765	176	141	114	78	br.	bl.	---	---
60.	12.0	7	3	1.450	752	184	146	123	72	br.	g. bl.	2	---
61.	12.7	7	3	1.347	741	186	147	123	83	d. br.	br.	2	1
62.	12.4	6	2	1.392	750	175	141	117	67	br.	bl.	2	2
63.	12.3	6	4	1.445	787	172	142	122	69	br.	gr.	4	---
64.	12.1	6	3	1.402	719	169	135	117	65	l. br.	br.	2	2
65.	12.11	6	4	1.531	814	168	140	124	95	d. br.	br.	1	1
66.	12.3	6	1	1.341	702	174	141	119	63	d. blo.	bl.	1	2
67.	12.10	6	1	1.426	733	176	142	124	84	d. br.	bl.	1	2
68.	12.3	5	3	1.453	765	176	142	127	74	d. br.	d. br.	2	3
69.	12.0	5	4	1.421	768	175	141	124	83	d. br.	gr.	2	3
70.	12.6	5	5	1.465	780	186	144	122	75	rd.	g. bl.	1	3
71.	12.2	4	1	1.564	791	184	148	125	85	d. blo.	bl.	---	---
72.	12.1	4	4	1.429	750	171	146	128	72	br.	gr.	1	2
73.	12.0	4	1	1.408	757	171	145	124	77	d. br.	d. br.	---	---
74.	12.7	8	3	1.485	770	176	152	125	73	br.	bl.	5	---
75.	12.3	7	3	1.394	737	184	141	122	71	br.	gr.	2	2
76.	12.8	7	3	1.322	681	176	137	114	57	l. blo.	bl.	3	---
77.	12.0	7	3	1.477	783	179	147	127	78	d. blo.	bl.	5	3
78.	12.9	6	1	1.491	762	178	142	118	71	br.	br.	---	---
79.	12.9	6	2	1.480	754	183	150	129	90	br.	g. bl.	1	1
80.	12.0	5	5	1.327	705	170	141	117	55	d. br.	bl.	3	1
81.	12.2	5	2	1.400	751	177	141	126	68	br.	bl.	1	---
82.	12.5	5	2	1.421	745	183	137	121	81	br.	br.	1	2
83.	12.5	5	5	1.365	704	178	135	116	57	d. br.	br.	1	1
84.	12.11	4	5	1.442	746	185	144	122	86	br.	bl.	5	5
85.	12.11	4	3	1.491	830	179	151	130	114	d. br.	bl.	4	4
86.	12.1	3	9	1.391	731	181	152	127	68	d. br.	bl.	5	4
87.	12.11	7	1	1.455	770	180	141	120	73	br.	bl.	1	1
88.	12.0	6	5	1.419	776	187	145	117	73	br.	br.	2	2
89.	12.0	6	1	1.431	751	181	136	121	72	l. br.	bl.	2	---
90.	12.2	6	1	1.484	764	178	141	117	82	blo.	bl.	1	1
91.	12.10	9	1	1.509	763	175	135	113	73	br.	gr.	---	---
92.	12.8	9	4	1.525	795	179	147	128	87	br.	g. bl.	4	3
93.	12.9	8	2	1.425	750	182	146	125	86	br.	gr.	1	1
94.	12.1	8	1	1.581	804	188	141	128	98	br.	bl.	---	---
95.	12.9	7	1	1.404	735	182	150	124	77	br.	bl.	1	---
96.	12.7	7	3	1.507	768	191	141	122	87	br.	gr.	2	2
97.	12.4	---	3	1.368	710	165	145	126	69	d. blo.	g. bl.	2	---
98.	12.0	6	1	1.355	681	180	140	112	64	blo.	gr.	---	---
99.	12.7	5	3	1.434	752	181	139	119	72	br.	br.	2	5
100.	12.11	4	1	1.408	733	184	145	119	83	l. br.	br.	1	2
101.	12.8	6	1	1.544	796	176	140	126	98	d. br.	d. br.	---	1
102.	12.10	8	3	1.550	790	180	141	125	83	br.	br.	---	3
103.	12.11	6	3	1.442	796	173	142	125	78	br.	g. bl.	2	1
104.	12.8	6	4	1.341	724	180	138	116	60	br.	bl.	2	5
105.	12.4	6	1	1.360	713	175	135	123	67	d. br.	d. br.	2	1
106.	12.5	6	4	1.528	790	187	147	124	85	br.	gr.	3	2
107.	12.0	6	3	1.463	784	177	140	127	81	d. br.	gr.	1	1
108.	12.10	5	2	1.398	730	178	136	115	72	br.	bl.	2	1
109.	12.7	5	2	1.582	824	186	142	125	98	br.	bl.	3	---
110.	12.0	5	2	1.469	728	193	140	121	76	bla.	d. br.	4	---
111.	12.0	5	2	1.442	762	180	141	125	77	br.	gr.	1	1
112.	12.0	5	3	1.465	747	181	139	121	83	br.	bl.	1	1
113.	12.9	4	2	1.400	740	174	135	119	76	br.	g. bl.	---	1
114.	12.0	4	6	1.514	765	171	137	120	82	br.	d. br.	6	2
115.	12.1	9	3	1.422	---	182	145	124	---	l. br.	bl.	2	---
116.	12.11	9	4	1.526	---	181	144	126	---	bla.	l. br.	3	2
117.	12.7	9	6	1.640	---	197	152	130	---	d. br.	gr.	1	5
118.	12.8	8	4	1.476	---	176	148	127	---	d. blo.	gr.	5	3
119.	12.9	8	1	1.512	---	177	145	126	---	bla.	l. br.	---	---
120.	12.4	8	1	1.512	---	181	143	124	---	d. br.	g. bl.	2	2
121.	12.9	8	3	1.416	---	184	145	126	---	d. blo.	bl.	3	2
122.	12.5	8	5	1.527	---	192	150	129	---	d. br.	l. br.	2	2
123.	12.6	8	2	1.438	---	177	141	116	---	blo.	g. bl.	3	---
124.	12.5	7	4	1.502	---	188	145	121	---	d. blo.	g. bl.	3	2
125.	12.5	7	3	1.604	---	184	152	129	---	d. br.	g. bl.	---	2
126.	12.0	7	3	1.483	---	182	153	120	---	d. br.	g. bl.	1	5
127.	12.6	6	3	1.528	---	180	144	125	---	d. blo.	g. bl.	1	1
128.	12.11	6	4	1.512	---	176	135	127	---	d. blo.	gr.	3	1

12-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
129.....	12.1	6	3	1,313	-----	163	144	126	-----	d. blo.	gr.	1	-----
130.....	12.1	6	3	1,278	-----	183	139	114	-----	d. blo.	gr.	4	-----
131.....	12.1	5	3	1,418	-----	181	143	120	-----	rd. br.	d. br.	1	2
132.....	12.3	5	4	1,353	-----	181	133	119	-----	d. br.	bl.	3	3
133.....	12.4	5	3	1,404	-----	183	153	127	-----	d. br.	d. br.	3	3
134.....	12.0	4	3	1,418	-----	186	140	121	-----	d. br.	bl.	1	1
135.....	12.6	8	3	1,475	-----	178	147	120	-----	d. br.	gr.	2	3
136.....	12.6	4	3	1,367	-----	177	146	121	-----	d. br.	gr.	1	1
137.....	12.4	5	1	1,469	-----	173	145	123	-----	d. blo.	bl.	2	-----
138.....	12.0	5	3	1,345	-----	176	137	115	-----	d. br.	gr.	-----	1
139.....	12.10	5	3	1,368	-----	177	137	118	-----	l. br.	l. br.	2	2
140.....	12.5	5	1	1,503	-----	186	148	125	-----	d. blo.	bl.	3	2
141.....	12.11	5	1	1,516	-----	181	150	128	-----	d. blo.	gr.	-----	-----
142.....	12.2	4	4	1,455	-----	183	149	128	-----	l. br.	bl.	2	4
143.....	12.3	6	3	1,424	-----	181	141	120	-----	rd. br.	bl.	3	3
144.....	12.5	6	-----	1,491	-----	182	147	129	-----	d. br.	bl.	4	3
145.....	12.9	6	1	1,432	-----	180	145	125	-----	blo.	gr.	3	2
146.....	12.6	6	1	1,388	-----	177	147	124	-----	d. br.	bl.	5	3
147.....	12.1	6	1	1,571	-----	189	144	125	-----	blo.	gr.	4	-----
148.....	12.8	6	1	1,492	-----	185	144	123	-----	l. br.	bl.	1	3
149.....	12.9	6	1	1,400	-----	180	145	117	-----	d. blo.	bl.	-----	-----
150.....	12.11	7	3	1,575	-----	178	149	115	-----	l. br.	gr.	5	1
151.....	12.11	7	3	1,453	-----	176	147	124	-----	l. br.	gr.	-----	-----
152.....	12.11	7	4	1,332	-----	173	129	110	-----	d. blo.	gr.	3	1
153.....	12.8	7	4	1,436	-----	178	143	122	-----	d. br.	l. br.	3	1
154.....	12.2	7	1	1,413	-----	172	135	120	-----	l. blo.	g. bl.	-----	-----
155.....	12.0	7	1	1,420	-----	177	141	123	-----	l. br.	l. br.	1	-----
156.....	12.6	7	1	1,515	758	181	144	128	-----	d. blo.	bl.	1	1
157.....	12.1	7	1	1,582	784	188	150	133	-----	l. br.	gr.	-----	-----
158.....	12.8	8	4	1,379	709	176	146	127	-----	d. br.	l. br.	3	6
159.....	12.8	8	4	1,459	777	190	145	119	-----	d. br.	l. br.	3	5
160.....	12.7	8	1	1,514	810	192	144	125	-----	l. br.	l. br.	-----	-----
161.....	12.5	8	1	1,492	772	175	148	122	-----	l. br.	gr.	-----	-----
162.....	12.11	4	4	1,467	-----	180	143	122	-----	d. blo.	bl.	3	3
163.....	12.5	5	4	1,312	-----	183	141	118	-----	d. blo.	bl.	3	4
164.....	12.0	4	4	1,282	-----	175	135	116	-----	d. br.	l. br.	6	2
165.....	12.2	7	3	1,333	691	174	142	124	-----	d. blo.	bl.	-----	-----

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
166.....	12.1	4	1,392	745	370	74	87	168.....	12.11	7	1,388	725	385	71	80
167.....	12.5	6	1,458	765	390	67	66	169.....	12.8	7	1,467	790	380	70	77

REPEATED MEASUREMENTS.

Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
6.....	12.6	7	1,461	767	390	70	85	25.....	12.6	6	1,291	688	346	64	55
7.....	12.7	6	1,522	811	418	74	91	26.....	12.5	6	1,302	700	345	64	63
8.....	12.1	7	1,378	722	382	70	63	27.....	12.5	4	1,431	780	477	69	77
9.....	12.11	2	1,493	800	415	-----	91	28.....	12.5	5	1,416	735	378	63	73
10.....	12.7	7	1,452	753	387	70	50	29.....	12.5	5	1,367	712	367	62	62
11.....	12.10	7	1,475	769	387	71	76	31.....	12.10	4	1,413	754	380	66	68
13.....	12.7	7	1,477	788	387	70	76	32.....	12.5	4	1,384	750	374	68	68
14.....	12.1	6	1,360	711	383	70	74	35.....	12.8	5	1,584	820	425	70	103
15.....	12.1	6	1,401	745	390	67	30	39.....	12.2	7	1,480	800	400	70	102
17.....	12.9	6	1,415	750	365	67	79	41.....	12.1	4	1,488	810	400	77	86
18.....	12.2	6	1,411	730	380	66	66	42.....	12.9	6	1,398	785	360	64	72
19.....	12.0	6	1,395	722	370	70	78	43.....	12.7	6	1,371	725	380	66	69
20.....	12.1	6	1,437	785	370	70	88	44.....	12.5	6	1,443	780	375	70	73
21.....	12.4	6	1,481	800	405	72	99	45.....	12.6	6	1,382	720	375	69	68
22.....	12.3	6	1,461	770	390	70	85	46.....	12.8	6	1,499	770	415	67	88
24.....	12.3	6	1,480	770	410	72	85	47.....	12.6	8	1,497	760	410	77	74

12-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS—Continued.

Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 11-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
48	12.1	6	1,503	810	400	74	91	79	12.10	5	1,501	740	380	65	64
49	12.2	6	1,372	785	350	67	71	80	12.2	5	1,387	735	370	63	67
50	12.1	6	1,474	780	395	67	72	81	12.9	5	1,486	735	410	67	73
51	12.6	6	1,384	740	380	68	69	82	12.11	6	1,564	850	420	79	115
52	12.10	6	1,441	790	385	75	189	83	12.6	4	1,442	730	375	69	71
53	12.4	5	1,544	810	430	77	112	84	12.1	5	1,409	725	380	68	70
56	12.6	5	1,530	810	410	72	95	87	12.3	4	1,385	740	370	64	63
57	12.2	5	1,414	735	365	69	89	88	12.2	4	1,407	780	380	72	86
58	12.11	6	1,477	770	390	67	72	89	12.0	3	1,333	760	375	67	72
59	12.5	6	1,410	760	370	73	73	96	12.10	3	1,420	760	395	71	83
60	12.2	6	1,383	745	350	64	63	98	12.3	3	1,454	750	395	72	65
61	12.3	6	1,363	730	360	66	64	101	12.9	6	1,394	735	375	67	72
63	12.2	5	1,493	790	385	71	81	103	12.9	6	1,406	750	365	67	67
64	12.11	5	1,465	785	380	75	79	106	12.2	6	1,517	820	400	74	92
65	12.5	5	1,507	780	405	74	92	108	12.1	6	1,492	745	410	72	97
66	12.3	5	1,523	795	385	71	82	109	12.10	4	1,422	750	375	71	81
67	12.10	5	1,544	845	415	78	101	110	12.4	4	1,448	760	370	66	72
68	12.0	5	1,391	725	365	65	64	111	12.0	5	1,362	705	370	70	63
69	12.6	5	1,373	720	355	67	62	112	12.0	4	1,306	680	335	62	55
70	12.7	5	1,411	737	398	70	74	113	12.1	5	1,424	755	370	70	94
71	12.8	5	1,507	810	390	70	84	115	12.11	4	1,342	720	345	69	71
72	12.8	5	1,404	760	370	71	71	116	12.4	4	1,505	780	420	68	96
76	12.11	5	1,437	895	435	81	151	118	12.4	4	1,384	740	355	65	62
77	12.4	5	1,476	770	385	73	77	119	12.11	4	1,389	725	370	65	67
78	12.9	5	1,440	765	385	70	76								

Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 10-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
30	12.0	7	1,460	785	375	69	80	39	12.0	4	1,460	755	380	64	67

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
133	100	154	.....	.....	150	.....	114	176	72	.....
134	99	171	.....	.....	151	.....	97	154	73	.....
135	99	155	68	.....	152	.....	93	140	64	.....
136	95	150	66	.....	153	.....	92	153	71	.....
137	95	143	70	.....	154	.....	101	148	70	.....
138	101	161	65	.....	155	.....	90	157	63	.....
139	100	162	67	.....	156	1,520	108	158	73	.....
140	98	167	71	.....	157	1,602	102	173	80	.....
141	96	164	73	.....	158	1,402	106	160	66	.....
142	103	165	73	.....	159	.....	100	146	75	.....
143	100	154	70	.....	160	.....	108	177	72	.....
144	92	155	77	.....	161	.....	98	150	72	.....
145	95	154	72	.....	162	.....	103	159	71	.....
146	104	165	68	.....	163	.....	92	148	65	.....
147	102	154	77	.....	164	.....	94	145	62	.....
148	103	162	70	.....	165	1,408	98	157	.....	.....
149	98	155	66	.....					

13-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	13.5	6	1	1,521	812	179	146	122	108	d. br.	d. br.	---	1
2	13.6	6	4	1,581	831	198	142	127	115	l. br.	bl.	1	2
3	13.3	6	2	1,567	784	169	149	121	80	d. blo.	bl.	2	1
4	13.5	6	2	1,465	755	174	134	116	67	br.	br.	---	---
5	13.1	6	2	1,389	729	188	147	122	77	d. blo.	gr.	2	2
6	13.3	---	2	1,568	831	191	145	126	107	br.	br.	1	---
7	13.11	---	4	1,368	712	185	146	122	71	d. br.	br.	3	1
8	13.4	---	1	1,570	836	194	151	125	101	blo.	br.	1	1
9	13.5	---	5	1,470	799	179	150	132	146	l. br.	br.	1	3
10	13.8	---	3	1,545	815	187	145	124	90	br.	br.	1	2
11	13.4	7	3	1,500	793	189	157	124	91	br.	gr.	2	1
12	13.8	---	3	1,600	785	175	148	128	99	br.	g. bl.	1	2
13	13.6	---	1	1,443	765	173	140	126	79	red.	g. bl.	---	---
14	13.1	---	1	1,534	811	177	139	116	100	br.	g. bl.	2	4
15	13.10	---	7	1,480	730	172	148	126	91	br.	br.	2	1
16	13.7	---	3	1,506	752	189	142	127	94	br.	gr.	1	3
17	13.3	6	2	1,485	773	183	141	123	78	bla.	br.	---	1
18	13.8	6	5	1,518	791	177	141	119	88	blo.	gr.	4	---
19	13.4	6	3	1,481	833	176	145	120	90	br.	br.	2	1
20	13.3	5	1	1,505	784	178	145	121	86	br.	br.	---	---
21	13.0	6	2	1,512	810	183	145	124	99	d. br.	d. gr.	2	1
22	13.8	---	7	1,404	743	173	145	126	86	br.	bl.	4	2
23	13.1	6	1	1,404	759	170	144	118	88	d. br.	bl.	---	---
24	13.3	8	1	1,486	776	192	144	124	85	br.	bl.	1	3
25	13.5	6	2	1,527	806	177	136	120	95	br.	g. bl.	1	1
26	13.9	6	2	1,455	795	179	139	119	82	br.	l. br.	---	---
27	13.4	4	3	1,369	654	165	135	114	61	bla.	l. br.	---	---
28	13.3	6	5	1,471	739	179	143	120	81	br.	gr.	3	1
29	13.6	6	4	1,612	825	178	142	119	100	br.	gr.	2	1
30	13.1	6	4	1,379	719	183	144	120	89	br.	l. br.	1	2
31	13.4	6	2	1,386	686	175	139	116	70	br.	gr.	3	2
32	13.5	5	2	1,516	823	183	143	125	102	br.	br.	1	5
33	13.8	5	1	1,399	743	176	146	119	64	l. br.	gr.	1	---
34	13.1	5	2	1,499	793	189	148	124	107	br.	g. br.	3	2
35	13.3	7	4	1,492	780	172	140	122	81	d. br.	gr.	1	4
36	13.2	7	1	1,398	734	177	140	115	68	br.	l. br.	---	---
37	13.0	5	6	1,379	752	176	139	125	76	red.	br.	2	7
38	13.4	5	3	1,455	781	181	143	123	81	d. br.	br.	2	1
39	13.5	3	1	1,373	751	182	147	121	76	d. br.	gr.	5	1
40	13.0	9	2	1,604	840	186	143	126	92	br.	gr.	---	3
41	13.3	8	2	1,573	839	184	148	129	123	br.	l. br.	2	1
42	13.0	8	3	1,495	787	190	145	124	89	br.	bl.	---	2
43	13.9	8	3	1,560	812	190	142	122	98	bla.	bl.	2	1
44	13.1	7	3	1,593	856	188	147	128	100	dark.	br.	2	1
45	13.1	7	3	1,439	742	180	141	118	76	blo.	br.	3	2
46	13.9	7	1	1,527	809	181	143	121	96	l. br.	bl.	---	2
47	13.0	7	3	1,413	768	178	140	120	72	br.	br.	1	3
48	13.0	7	1	1,435	767	194	143	125	83	br.	g. bl.	2	1
49	13.10	7	2	1,535	811	180	144	123	92	d. br.	gr.	2	1
50	13.3	6	2	1,483	757	177	139	122	77	br.	bl.	1	1
51	13.9	5	3	1,437	782	180	141	124	88	d. blo.	bl.	---	3
52	13.2	4	1	1,564	791	184	148	125	86	d. blo.	bl.	---	---
53	13.6	4	3	1,357	692	174	140	119	66	red.	bl.	1	1
54	13.2	4	2	1,562	821	186	151	133	109	---	---	2	1
55	13.10	5	1	1,464	743	182	137	114	82	br.	br.	---	---
56	13.8	8	4	1,433	742	176	147	121	86	d. br.	br.	3	6
57	13.3	8	7	1,445	750	185	147	119	76	br.	bl.	5	4
58	13.3	8	3	1,470	770	183	149	122	83	br.	br.	3	---
59	13.7	8	3	1,547	798	189	149	126	85	---	---	---	4
60	13.2	8	1	1,614	827	184	152	130	107	br.	bl.	---	---
61	13.1	8	3	1,459	780	174	147	126	81	br.	bl.	1	2
62	13.10	7	1	1,507	802	177	145	126	88	d. blo.	bl.	---	---
63	13.6	7	5	1,495	763	192	155	130	80	d. blo.	gr.	1	3
64	13.4	7	2	1,500	834	183	146	124	84	br.	br.	3	3
65	13.5	7	4	1,520	828	187	146	125	88	br.	bl.	2	1
66	13.0	6	2	1,576	831	180	150	128	160	l. br.	bl.	1	2
67	13.2	6	3	1,491	769	178	135	118	75	d. br.	br.	2	1
68	13.2	6	2	1,456	766	173	146	122	91	l. br.	g. bl.	4	2
69	13.9	6	1	1,528	786	185	140	121	84	br.	bl.	---	2
70	13.1	5	1	1,498	811	185	149	131	95	br.	bl.	---	---
71	13.2	4	14	1,419	751	164	145	120	73	d. br.	br.	4	11
72	13.6	8	6	1,519	828	179	135	117	84	br.	gr.	5	2
73	13.10	7	1	1,392	750	174	151	126	70	br.	br.	1	---
74	13.9	7	7	1,528	812	177	136	130	103	d. br.	g. bl.	5	1
75	13.6	7	3	1,502	782	185	146	119	78	d. br.	g. br.	3	1
76	13.4	6	3	1,428	740	179	153	116	73	d. br.	g. bl.	7	1
77	13.11	9	5	1,563	804	176	136	120	91	---	---	5	4
78	13.8	9	5	1,581	815	180	135	112	89	blo.	bl.	1	5

13-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
79.....	13.7	9	1	1,525	791	183	141	124	109	br.	g. bl.	1	---
80.....	13.10	9	2	1,593	830	196	156	132	109	br.	gr.	1	1
81.....	13.0	9	1	1,511	796	192	141	120	94	br.	gr.	3	---
82.....	13.6	9	4	1,581	844	196	153	135	152	br.	bl.	3	1
83.....	13.11	8	8	1,564	816	188	142	123	92	blo.	bl.	5	3
84.....	13.6	8	1	1,580	780	187	150	125	94	d. blo.	g. bl.	2	2
85.....	13.6	8	2	1,550	811	189	147	125	95	br.	gr.	---	---
86.....	13.1	8	3	1,455	742	175	151	130	80	l. blo.	g. bl.	2	---
87.....	13.2	8	1	1,446	749	182	153	122	81	l. br.	g. bl.	1	---
88.....	13.1	7	5	1,517	796	188	145	127	108	br.	br.	1	3
89.....	13.5	6	1	1,521	812	179	146	122	108	br.	br.	---	---
90.....	13.3	6	2	1,567	784	169	149	121	80	d. br.	bl.	2	1
91.....	13.5	5	2	1,465	755	174	134	116	67	br.	br.	---	---
92.....	13.1	5	2	1,389	729	188	147	122	77	blo.	gr.	2	2
93.....	13.4	5	1	1,397	743	169	145	114	69	d. blo.	gr.	1	---
94.....	13.1	8	1	1,669	850	187	153	126	115	br.	gr.	3	2
95.....	13.6	---	---	1,593	814	190	149	130	114	br.	bl.	2	1
96.....	13.4	---	3	1,369	654	165	135	114	61	bla.	l. br.	2	---
97.....	13.10	8	2	1,586	810	185	139	126	93	l. br.	bl.	1	1
98.....	13.8	8	3	1,571	800	182	142	124	93	d. br.	bl.	---	2
99.....	13.0	8	3	1,501	790	184	145	127	118	br.	g. bl.	2	1
100.....	13.0	6	2	1,419	796	178	144	124	98	d. br.	d. br.	3	1
101.....	13.8	6	4	1,341	724	180	138	116	60	br.	bl.	2	5
102.....	13.9	5	1	1,487	760	178	144	120	85	br.	bl.	---	---
103.....	13.5	8	2	1,509	776	185	154	129	87	br.	br.	1	2
104.....	13.0	5	4	1,445	739	185	142	123	86	br.	br.	2	1
105.....	13.0	4	1	1,454	748	182	143	124	82	d. br.	d. br.	1	---
106.....	13.0	4	3	1,528	807	187	145	121	90	br.	bl.	3	4
107.....	13.2	---	1	1,574	829	188	149	135	99	d. blo.	g. bl.	1	---
108.....	13.5	---	1	1,540	770	177	138	116	75	br.	l. br.	---	---
109.....	13.8	---	1	1,560	826	194	156	131	105	d. br.	bl.	1	2
110.....	13.8	---	1	1,560	841	194	142	123	103	d. br.	l. br.	3	---
111.....	13.10	9	3	1,533	---	181	136	116	---	d. br.	bl.	---	2
112.....	13.3	9	3	1,465	---	190	138	118	---	d. br.	g. bl.	4	1
113.....	13.10	8	2	1,552	---	174	144	130	---	d. blo.	g. bl.	1	2
114.....	13.5	8	1	1,573	---	185	141	124	---	d. br.	g. bl.	1	---
115.....	13.1	8	1	1,483	---	189	145	130	---	d. blo.	bl.	2	---
116.....	13.10	8	6	1,496	---	175	141	119	---	d. br.	g. bl.	5	3
117.....	13.8	7	2	1,502	---	182	147	127	---	d. blo.	bl.	3	3
118.....	13.6	7	1	1,557	---	181	141	128	---	d. br.	d. br.	3	3
119.....	13.9	7	3	1,573	---	183	144	122	---	d. br.	l. br.	2	2
120.....	13.2	6	2	1,430	---	180	144	126	---	d. br.	bl.	1	3
121.....	13.2	6	1	1,486	---	176	139	124	---	d. br.	g. bl.	1	---
122.....	13.10	5	1	1,456	---	185	145	124	---	d. br.	d. br.	1	2
123.....	13.3	5	3	1,455	---	187	143	123	---	d. br.	d. br.	3	---
124.....	13.10	---	2	1,580	817	189	140	128	---	d. br.	l. br.	---	1
125.....	13.2	---	3	1,554	833	182	149	130	---	d. br.	gr.	1	1
126.....	13.8	---	1	1,525	805	181	140	122	---	d. br.	gr.	---	---
127.....	13.8	4	2	1,397	710	177	139	121	---	d. br.	d. br.	1	2
128.....	13.7	5	6	1,417	---	176	150	131	---	d. br.	bl.	2	3
129.....	13.4	5	7	1,416	---	180	141	125	---	d. br.	bl.	3	3
130.....	13.10	5	1	1,456	---	178	145	123	---	d. br.	d. br.	2	1
131.....	13.8	5	1	1,413	---	179	139	120	---	bla.	d. br.	1	0
132.....	13.2	6	1	1,550	---	188	141	124	---	l. br.	l. br.	---	---
133.....	13.7	6	3	1,458	---	179	140	124	---	l. br.	gr.	---	3
134.....	13.7	6	2	1,433	---	178	135	116	---	red.	bl.	5	1
135.....	13.10	6	5	1,437	---	180	140	122	---	d. br.	bl.	3	1
136.....	13.8	7	1	1,509	---	175	145	123	---	d. br.	gr.	---	---
137.....	13.2	7	5	1,530	804	189	144	125	---	l. br.	g. br.	2	2
138.....	13.7	7	4	1,370	715	181	143	125	---	d. br.	l. br.	1	6
139.....	13.5	7	3	1,400	711	180	142	117	---	d. blo.	g. bl.	---	1
140.....	13.2	7	2	1,476	755	189	134	114	---	d. br.	gr.	---	1
141.....	13.2	5	7	1,437	---	185	148	125	---	d. br.	d. br.	6	3

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
142.....	13.0	7	1,484	755	415	76	87

13-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS.

Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
7	13.7	9	1,468	788	415	74	84	55	13.6	6	1,620	870	435	82	125
9	13.6		1,552	808	402	72	83	56	13.5	5	1,402	790	365	67	73
13	13.11		1,476	768	405	75	84	58	13.2		1,392	745	360	69	73
14	13.2		1,750	894	486	77	110	59	13.5	8	1,522	800	405	72	90
15	13.9		1,523	780	420	81	81	60	13.1		1,559	795	410	74	93
16	13.0		1,440	764	384	65	77	61	13.8		1,417	765	385	72	91
17	13.9		1,542	842	415	74	96	62	13.4		1,465	790	390	71	72
18	13.3		1,410	752	366	73	75	63	13.3	7	1,532	790	400	69	77
20	13.3		1,538	813	425	71	75	66	13.3		1,400	735	365	70	69
21	13.0		1,602	865	403	72	82	67	13.11	7	1,493	755	415	74	98
22	13.9		1,473	804	393	72	82	68	13.7	6	1,505	790	400	69	84
23	13.4		1,475	825	405	71	81	70	13.7	6	1,537	820	410	76	86
25	13.3		1,435	758	388	71	81	71	13.9	5	1,632	820	450	75	96
26	13.5		1,465	850	400	65	85	72	13.2	5	1,498	785	395	75	75
27	13.2		1,556	804	427	76	90	73	13.2	5	1,466	790	390	74	87
28	13.4		1,413	750	370	67	68	75	13.4		1,464	785	390	65	79
29	13.3		1,527	830	410	76	117	77	13.9		1,538	815	410	74	88
30	13.1		1,479	765	395	70	79	78	13.2	7	1,529	800	395	73	82
31	13.2	6	1,451	787	392	69	83	79	13.10		1,544	805	415	73	100
32	13.1	6	1,485	780	382	65	76	81	13.2	6	1,481	785	385	70	76
33	13.3	6	1,611	820	450	70	104	82	13.5	6	1,498	775	400	76	94
35	13.6	6	1,473	830	400	81	93	83	13.5	6	1,450	755	380	68	65
37	13.6	6	1,426	775	385	71	84	90	13.3	6	1,555	810	420	71	93
39	13.6	6	1,482	810	395	75	83	93	13.9	9	1,488	815	410	75	94
40	13.5	6	1,568	770	420	68	77	94	13.11	9	1,625	845	450	73	101
42	13.9	7	1,492	820	405	68	106	102	13.11	9	1,605	825	445	72	91
43	13.10	7	1,435	740	400	68	67	103	13.10	7	1,470	805	380	68	85
46	13.1	7	1,501	820	410	80	117	104	13.9	7	1,522	745	365	69	89
47	13.1	7	1,575	850	420	80	132	106	13.7	7	1,563	825	435	74	93
49	13.0	6	1,509	840	405	73	91	107	13.1	7	1,502	820	395	69	92
51	13.11	6	1,504	775	395	70	73	109	13.8	6	1,653	855	465	79	118
52	13.1	6	1,416	770	375	75	85	110	13.11	6	1,432	755	430	72	84
53	13.11	6	1,562	810	450	79	102	111	13.8	6	1,521	800	415	79	97
54	13.6	7	1,605	860	430	82	139	113	13.9	5	1,490	780	395	70	85

Number in 11-year series.	Age.	Grade.	Stature.	H e i g h t sitting.	Forearm.	Breadth of hand.	Weight.	Number in 11-year series.	Age.	Grade.	Stature.	H e i g h t sitting.	Forearm.	Breadth of hand.	Weight.
16	13.1	7	1,462	755	380	....	71	55	13.0	4	1,540	835	420	72	102

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
107	1,552	101				131		96	148	71	
108	1,560	102				132		107	170	72	
109	1,560	103				133		103	168	69	
110	1,546	103				134		163	173	67	
123		106	174			135		103	160	70	
124	1,668	112	172	75		136		100	155	72	
125	1,565	103	163			137	1,513	104	163	66	
126	1,498	99	153	68		138		104	147	68	
127	1,470	100	142			139	1,406	96	153	68	
128		109	164	73		140	1,470	103	156		
129		95	139	73		141		100	165	74	385
130		101	169	68							

14-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	14.5	-----	1	1,617	857	190	150	132	116	blo.	bl.	1	1
2.....	14.11	-----	3	1,496	806	182	148	131	99	br.	bl.	-----	2
3.....	14.9	-----	2	1,583	850	192	149	131	110	d. br.	bl.	1	1
4.....	14.7	-----	3	1,450	813	176	140	122	94	d. br.	gr.	2	2
5.....	14.4	-----	2	1,537	824	176	146	126	91	blo.	bl.	3	5
6.....	14.2	-----	3	1,590	833	184	140	127	103	bla.	bl.	1	2
7.....	14.7	9	1	1,631	852	190	144	125	125	blo.	bl.	-----	-----
8.....	14.3	2	1	1,649	862	188	149	130	113	blo.	br.	1	2
9.....	14.6	-----	1	1,622	856	189	143	127	103	blo.	g. bl.	1	-----
10.....	14.2	-----	3	1,647	841	179	151	125	114	d. br.	bl.	1	1
11.....	14.9	8	1	1,630	847	195	148	133	114	br.	g. bl.	-----	1
12.....	14.4	-----	2	1,593	820	179	144	125	106	br.	g. bl.	2	1
13.....	14.9	-----	2	1,480	799	182	134	122	86	d. br.	gr.	-----	1
14.....	14.10	8	2	1,492	775	176	145	125	89	br.	d. br.	6	1
15.....	14.10	-----	2	1,467	769	182	140	120	79	bla.	d. br.	3	4
16.....	14.3	-----	4	1,599	847	190	143	124	108	br.	bl.	1	2
17.....	14.3	7	1	1,656	855	182	150	135	112	br.	bl.	2	1
18.....	14.2	-----	2	1,395	750	176	150	124	83	bla.	d. br.	1	1
19.....	14.6	-----	2	1,460	757	164	131	113	80	br.	bl.	1	-----
20.....	14.8	8	3	1,585	798	184	145	124	108	br.	g. bl.	1	1
21.....	14.9	-----	1	1,478	783	191	151	128	106	d. br.	gr.	3	1
22.....	14.10	8	2	1,618	851	188	146	129	129	br.	g. bl.	1	1
23.....	14.7	-----	1	1,567	821	193	150	125	92	blo.	bl.	-----	3
24.....	14.9	6	3	1,514	777	180	151	128	90	bla.	g. br.	2	-----
25.....	14.1	7	4	1,687	880	184	148	131	175	br.	br.	5	1
26.....	14.6	9	5	1,582	810	182	141	122	99	br.	bl.	5	1
27.....	14.1	8	1	1,650	895	192	151	134	145	red.	bl.	-----	-----
28.....	14.5	8	1	1,446	776	202	150	128	95	bla.	gr.	-----	2
29.....	14.8	8	4	1,440	792	190	140	122	88	br.	bl.	3	4
30.....	14.8	8	4	1,544	821	188	148	126	94	br.	bl.	6	2
31.....	14.4	6	4	1,557	804	177	146	124	97	bla.	g. bl.	4	-----
32.....	14.9	6	1	1,591	813	177	139	119	99	blo.	g. bl.	2	2
33.....	14.0	6	2	1,530	805	175	144	112	88	d. br.	g. bl.	3	3
34.....	14.4	7	2	1,591	859	193	148	127	116	br.	gr.	1	2
35.....	14.5	7	3	1,629	835	179	147	123	103	d. br.	l. br.	1	3
36.....	14.2	7	5	1,404	726	181	135	113	60	br.	g. br.	3	1
37.....	14.4	7	5	1,421	731	170	142	124	76	d. br.	l. br.	1	5
38.....	14.6	7	1	1,451	759	171	136	124	79	br.	gr.	3	2
39.....	14.0	7	4	1,431	749	176	136	115	73	d. blo.	l. br.	2	4
40.....	14.7	7	3	1,574	797	178	145	127	134	blo.	bl.	1	1
41.....	14.2	5	11	1,480	799	168	148	130	92	br.	br.	4	12
42.....	14.6	9	4	1,517	788	182	143	122	101	br.	bl.	2	3
43.....	14.6	9	8	1,560	810	193	149	122	103	br.	gr.	4	4
44.....	14.0	8	4	1,420	772	178	135	119	77	red.	bl.	3	1
45.....	14.4	8	2	1,523	790	180	136	120	78	br.	bl.	1	1
46.....	14.0	8	2	1,630	832	187	150	133	141	bla.	bl.	1	-----
47.....	14.2	8	1	1,502	805	201	149	120	88	br.	gr.	-----	1
48.....	14.2	7	4	1,518	801	183	140	125	90	d. br.	br.	2	3
49.....	14.7	7	1	1,457	795	189	147	127	100	d. br.	gr.	-----	-----
50.....	14.0	7	1	1,549	786	189	151	121	82	l. br.	bl.	1	-----
51.....	14.1	6	8	1,506	802	170	136	118	105	d. br.	l. bl.	-----	6
52.....	14.6	7	1	1,422	762	174	145	126	78	br.	br.	1	1
53.....	14.3	4	1	1,455	789	182	144	125	95	br.	gr.	1	2
54.....	14.7	4	1	1,575	846	177	148	129	126	d. br.	bl.	1	1
55.....	14.1	8	2	1,509	805	181	145	124	83	d. blo.	bl.	5	3
56.....	14.2	8	1	1,430	725	186	142	121	89	br.	bl.	2	1
57.....	14.2	7	3	1,460	753	185	144	129	77	d. br.	gr.	-----	2
58.....	14.2	7	2	1,554	835	179	143	126	104	blo.	gr.	1	1
59.....	14.3	7	4	1,564	806	188	149	135	92	br.	bl.	5	-----
60.....	14.3	5	9	1,546	820	180	152	126	115	d. br.	br.	6	4
61.....	14.8	4	1	1,492	784	180	152	122	94	br.	gr.	4	2
62.....	14.2	8	1	1,591	871	189	142	128	114	br.	l. br.	-----	1
63.....	14.5	8	1	1,605	819	185	154	137	99	br.	g. bl.	-----	-----
64.....	14.10	8	8	1,581	801	180	136	118	78	l. br.	d. br.	2	5
65.....	14.10	8	2	1,589	815	182	147	126	95	d. br.	gr.	2	-----
66.....	14.6	9	2	1,554	824	188	142	125	96	d. br.	l. br.	1	1
67.....	14.8	9	1	1,441	769	185	138	119	72	d. br.	gr.	1	1
68.....	14.11	9	3	1,481	807	182	147	127	97	d. br.	br.	1	1
69.....	14.11	9	2	1,615	841	182	151	127	120	br.	g. bl.	4	1
70.....	14.5	7	3	1,510	761	181	145	127	108	br.	bl.	3	1
71.....	14.8	6	2	1,365	705	180	144	122	72	br.	gr.	-----	1
72.....	14.5	6	2	1,544	847	174	144	122	105	br.	g. bl.	3	-----
73.....	14.5	8	3	1,538	827	176	142	126	88	br.	bl.	-----	2
74.....	14.11	6	5	1,515	773	178	150	137	113	bla.	d. br.	3	5
75.....	14.7	9	2	1,647	862	190	144	125	112	br.	g. bl.	1	-----
76.....	14.0	8	2	1,554	865	182	138	125	112	d. br.	d. br.	1	2
77.....	14.0	8	5	1,564	852	181	141	120	106	br.	br.	-----	5
78.....	14.10	8	1	1,581	811	185	134	116	96	d. blo.	gr.	2	-----
79.....	14.6	8	3	1,593	798	177	139	125	101	br.	bl.	3	3
80.....	14.3	8	2	1,487	781	180	139	120	85	br.	g. bl.	6	2
81.....	14.2	4	2	1,410	737	185	147	122	72	br.	gr.	2	1

14-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
82.....	14.4	7	1	1,391	689	170	141	121	71	br.	br.	1	---
83.....	14.5	7	1	1,405	745	182	136	119	69	l. br.	bl.	2	---
84.....	14.0	7	2	1,451	794	182	139	121	104	br.	br.	1	1
85.....	14.9	6	1	1,565	812	194	145	122	97	l. br.	bl.	---	---
86.....	14.5	6	1	1,561	792	180	143	123	107	bla.	br.	---	---
87.....	14.8	6	2	1,453	791	182	139	122	100	br.	br.	1	3
88.....	14.11	6	6	1,620	876	186	147	128	131	l. br.	d. br.	3	2
89.....	14.2	---	1	1,513	812	182	153	133	105	blo.	gr.	1	1
90.....	14.11	---	4	1,600	858	196	146	127	147	d. br.	d. br.	3	1
91.....	14.1	---	6	1,618	824	178	146	123	120	d. br.	d. br.	4	1
92.....	14.5	---	1	1,600	915	178	145	124	122	d. br.	g. bl.	1	---
93.....	14.0	---	5	1,618	812	178	149	128	100	br.	bl.	1	2
94.....	14.11	---	2	1,578	824	183	144	123	98	br.	d. br.	1	1
95.....	14.9	---	5	1,580	814	187	139	125	109	l. br.	d. br.	1	2
96.....	14.2	---	3	1,535	803	176	146	126	94	d. br.	bl.	1	2
97.....	14.4	6	4	1,541	---	177	135	121	---	l. br.	gr.	4	1
98.....	14.5	---	10	1,521	797	177	136	116	---	d. br.	g. bl.	3	1
99.....	14.0	8	4	1,642	857	176	149	130	---	l. br.	l. bl.	3	1
100.....	14.4	---	1	1,540	816	187	141	127	119	d. br.	gr.	1	---
101.....	14.1	9	3	1,475	---	180	142	116	---	d. br.	d. br.	1	1
102.....	14.0	9	4	1,490	---	185	146	125	---	d. br.	bl.	2	---
103.....	14.7	9	4	1,596	---	196	150	128	---	---	---	1	6
104.....	14.7	9	5	1,540	---	180	141	122	---	d. br.	g. bl.	1	3
105.....	14.1	8	2	1,492	---	187	145	126	---	bla.	br.	---	---
106.....	14.10	8	1	1,532	---	186	144	126	---	d. br.	g. bl.	---	1
107.....	14.4	7	1	1,553	---	184	145	127	---	d. br.	l. br.	1	---
108.....	14.4	6	2	1,577	---	183	138	124	---	---	---	1	---
109.....	14.4	6	4	1,468	---	183	142	130	---	bla.	d. br.	5	5
110.....	14.2	---	2	1,696	902	188	152	133	---	br.	g. bl.	3	1
111.....	14.6	---	2	1,583	887	188	145	128	---	d. br.	br.	1	---
112.....	14.8	8	2	1,408	735	180	132	112	66	d. br.	gr.	1	1
113.....	14.3	9	1	1,575	---	188	146	131	125	d. br.	d. br.	---	---
114.....	14.6	5	1	1,501	---	170	143	125	---	d. br.	bl.	2	2
115.....	14.6	9	1	1,437	827	177	130	117	---	l. br.	gr.	---	---

"Twin.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
116.....	14.7	9	1,610	877	432	78	115	118.....	14.0	7	1,476	770	385	69	80
117.....	14.6	9	1,642	890	435	76	115								

REPEATED MEASUREMENTS.

Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
1.....	14.4	7	1,523	820	420	72	115	50.....	14.4	7	1,556	805	420	70	95
9.....	14.3	8	1,551	857	437	81	148	55.....	14.10	6	1,492	770	405	66	99
10.....	14.5	8	1,560	800	400	70	102	60.....	14.1	9	1,632	860	440	74	121
13.....	14.7	8	1,478	805	403	71	85	62.....	14.11	8	1,525	795	395	66	92
16.....	14.6	7	1,525	780	435	70	100	64.....	14.4	8	1,549	875	420	80	101
19.....	14.4	7	1,510	870	428	75	102	65.....	14.5	8	1,554	880	420	71	96
21.....	13.11	6	1,571	862	422	73	114	66.....	14.9	7	1,584	840	340	78	141
23.....	14.2	7	1,431	780	390	74	97	68.....	14.3	7	1,502	815	420	76	110
25.....	14.6	7	1,581	850	425	70	107	73.....	14.5	7	1,442	775	390	72	81
26.....	14.10	7	1,547	825	400	73	92	75.....	14.7	8	1,554	825	420	71	93
30.....	14.2	7	1,575	835	435	73	104	76.....	14.7	7	1,498	800	415	70	86
31.....	14.4	7	1,464	750	400	76	80	84.....	14.7	9	1,612	825	430	75	102
32.....	14.5	6	1,528	840	405	73	108	85.....	14.6	9	1,572	845	425	74	103
33.....	14.7	6	1,446	780	380	73	71	87.....	14.0	9	1,515	800	400	71	93
36.....	14.3	8	1,490	790	410	72	85	97.....	14.11	9	1,612	850	420	73	103
41.....	14.4	9	1,632	860	425	74	134	98.....	14.9	9	1,640	870	435	76	104
43.....	14.11	9	1,598	835	430	73	106	99.....	14.1	9	1,547	825	420	74	142
45.....	14.1	8	1,508	780	400	73	82	100.....	14.1	7	1,450	815	385	71	104
47.....	14.1	---	1,488	815	390	75	82	103.....	14.5	9	1,602	890	415	77	99
48.....	14.6	---	1,497	760	405	75	105	105.....	14.3	5	1,513	815	410	77	93
49.....	14.11	---	1,620	865	440	78	106	106.....	14.6	5	1,554	835	420	74	97

14-year-old girls. Worcester, Mass.—Continued.

REPEATED MEASUREMENTS—Continued.

Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 12-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
5	14.1	9	1,615	860	432	75	119	8	14.1	9	1,563	815	417	79	88
6	14.0	---	1,658	854	440	73	97	87	14.0	8	1,526	815	400	71	83

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
88	1,665	101	---	---	---	98	---	101	168	79	---
89	1,545	103	---	---	---	99	---	101	162	82	---
90	1,596	108	---	---	---	100	1,562	103	---	---	---
91	1,663	104	---	---	---	110	1,706	111	158	77	---
92	1,665	104	---	---	---	111	1,579	102	168	74	---
93	1,665	98	---	---	---	112	---	93	139	67	380
94	1,626	98	---	---	---	113	---	109	164	79	440
95	1,612	105	---	---	---	114	---	96	166	72	415
96	1,543	97	---	---	---	115	1,467	112	165	---	---
97	---	100	157	71	---	---	---	---	---	---	---

15-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	15.3	---	1	1,547	844	181	146	124	107	blo.	bl.	---	1
2	15.4	9	1	1,594	847	176	147	123	99	d. br.	bl.	---	1
3	15.10	---	1	1,552	823	177	142	126	102	d. br.	bl.	---	1
4	15.11	---	1	1,548	803	186	145	125	100	l. br.	d. br.	---	2
5	15.5	---	3	1,592	817	185	148	126	108	d. br.	br.	1	3
6	15.2	---	2	1,614	863	173	141	121	109	br.	br.	1	1
7	15.7	---	1	1,638	859	184	148	128	107	blo.	g. br.	---	---
8	15.1	8	2	1,608	855	172	145	126	110	d. br.	bl.	---	1
9	15.11	---	2	1,574	833	185	138	129	118	d. br.	d. br.	1	1
10	15.10	---	2	1,591	867	190	144	126	119	br.	bl.	2	2
11	15.2	---	4	1,612	822	183	150	126	127	l. br.	bl.	1	1
12	15.0	6	1	1,410	754	182	137	118	73	br.	g. bl.	1	1
13	15.7	8	1	1,600	807	---	---	---	87	blo.	bl.	2	3
14	15.11	8	1	1,625	861	---	---	---	123	br.	br.	1	5
15	15.2	8	2	1,552	826	189	142	122	94	br.	l. br.	1	1
16	15.9	8	4	1,513	790	192	148	131	160	l. br.	bl.	1	2
17	15.7	---	1	1,604	875	187	146	132	127	br.	g. bl.	---	---
18	15.7	---	2	1,516	841	180	146	125	91	br.	gr.	2	---
19	15.11	9	1	1,561	843	181	153	123	105	br.	bl.	---	---
20	15.10	9	1	1,583	856	182	148	124	91	red br.	br.	---	1
21	15.0	8	3	1,568	817	178	133	121	106	blo.	l. bl.	1	1
22	15.0	8	1	1,548	812	180	148	126	109	d. br.	d. br.	---	---
23	15.0	8	1	1,601	832	190	149	124	115	d. br.	l. br.	2	3
24	15.5	8	3	1,523	789	178	147	125	90	d. br.	l. br.	2	2
25	15.0	7	3	1,597	847	181	140	128	104	l. br.	bl.	3	2
26	15.7	8	2	1,637	850	187	158	134	116	br.	bl.	4	1
27	15.3	8	4	1,568	801	181	141	124	98	br.	gr.	1	2
28	15.8	9	1	1,539	818	191	146	128	105	br.	bl.	---	---
29	15.9	9	1	1,777	888	194	151	130	126	br.	br.	---	3
30	15.2	9	2	1,599	836	178	145	129	105	l. br.	g. bl.	1	2
31	15.6	9	4	1,555	842	184	146	123	103	br.	g. bl.	---	3
32	15.9	9	3	1,594	841	192	148	121	102	br.	g. bl.	3	1
33	15.1	9	5	1,483	825	187	147	127	105	br.	bl.	1	5
34	15.2	9	1	1,564	821	176	150	125	86	bla.	br.	2	2
35	15.0	9	3	1,561	826	183	144	122	90	br.	g. bl.	2	---

^a Twin.

15-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
36	15.1	9	8	1,597	868	187	150	127	100	br.	bl.	5	4
37	15.6	8	6	1,571	863	184	143	123	94	br.	gr.	4	4
38	15.10	9	1	1,494	847	185	152	128	109	d. br.	bl.	2	---
39	15.5	8	1	1,523	814	180	135	122	91	blo.	gr.	---	---
40	15.9	8	3	1,538	823	181	143	123	89	br.	bl.	1	1
41	15.9	8	1	1,615	851	192	148	125	109	blo.	g. bl.	---	---
42	15.10	6	6	1,589	825	182	144	126	96	br.	g. bl.	3	3
43	15.6	8	1	1,576	863	183	140	121	84	d. br.	g. br.	2	2
44	15.1	8	2	1,630	827	180	137	126	106	br.	gr.	1	2
45	15.5	7	1	1,577	830	194	142	128	112	br.	g. bl.	---	---
46	15.1	8	1	1,565	822	190	146	128	98	l. br.	gr.	---	1
47	15.7	9	1	1,581	821	178	140	121	92	d. blo.	gr.	---	---
48	15.7	Jr.	2	1,610	843	188	148	127	123	l. br.	g. bl.	2	1
49	15.5	4	9	1,606	875	189	153	135	121	red br.	gr.	1	3
50	15.7	---	1	1,571	837	191	147	122	87	blo.	bl.	1	1
51	15.8	---	2	1,584	823	187	142	123	91	d. br.	bl.	3	3
52	15.4	H. S.	3	1,493	832	177	151	130	96	br.	br.	3	2
53	15.0	---	2	1,580	864	180	146	129	144	d. br.	g. bl.	1	---
54	15.4	H. S.	1	1,580	837	184	151	130	101	l. br.	g. bl.	---	---
55	15.4	---	1	1,580	837	184	151	130	102	l. br.	g. bl.	---	---
56	15.6	---	1	1,581	813	184	145	128	111	red.	gr.	3	1
57	15.3	2d yr.	4	1,655	857	190	138	132	124	d. br.	gr.	---	---
58	15.0	---	6	1,620	876	186	147	128	131	l. br.	d. br.	3	2
59	15.11	---	1	1,592	850	185	140	124	121	d. br.	d. br.	---	---
60	15.1	---	2	1,504	787	180	146	127	101	d. br.	d. br.	1	---
61	15.9	---	7	1,645	871	188	145	130	130	br.	bl.	2	4
62	15.10	2d yr.	2	1,522	827	191	148	127	117	d. br.	g. bl.	5	---
63	15.10	---	6	1,547	855	183	155	131	108	d. br.	d. br.	3	4
64	15.6	2d yr.	3	1,572	845	184	143	120	106	d. blo.	g. bl.	1	2
65	15.8	---	1	1,588	852	188	154	132	105	br.	br.	---	1
66	15.4	1st yr.	1	1,455	752	189	140	119	77	d. br.	gr.	1	1
67	15.10	---	6	1,548	835	184	145	128	95	br.	gr.	2	2
68	15.4	1st yr.	5	1,589	836	183	141	123	113	br.	bl.	5	1
69	15.2	---	2	1,578	838	187	145	127	108	d. br.	d. br.	1	1
70	15.5	---	2	1,602	812	188	152	131	107	br.	g. bl.	---	1
71	15.2	H. S.	---	1,631	872	190	149	135	135	l. br.	gr.	1	1
72	15.5	---	6	1,614	866	188	147	125	110	d. br.	bl.	3	3
73	15.8	H. S.	3	1,518	848	185	150	133	107	br.	gr.	1	2
74	15.7	---	3	1,555	803	187	144	128	109	d. blo.	g. bl.	---	2
75	15.10	---	2	1,596	837	178	145	131	110	br.	gr.	1	2
76	15.7	---	2	1,584	863	192	151	132	115	---	---	1	1
77	15.5	---	1	1,554	810	191	150	126	110	br.	br.	---	---
78	15.3	---	3	1,454	820	181	140	122	98	d. br.	g. bl.	2	2
79	15.4	---	4	1,534	821	186	145	122	102	d. br.	l. br.	1	1
80	15.5	---	1	1,674	903	185	142	133	133	br.	g. bl.	1	1
81	15.4	---	2	1,592	850	181	144	126	116	br.	br.	1	a3
82	15.7	---	7	1,555	823	184	151	119	105	red br.	g. bl.	3	4
83	15.0	---	---	1,630	876	176	141	123	117	d. br.	l. br.	1	1
84	15.7	---	1	1,565	832	187	144	126	96	d. br.	l. br.	1	3
85	15.0	---	1	1,615	862	175	148	135	143	d. br.	gr.	1	1
86	15.4	---	2	1,549	826	193	147	133	134	d. blo.	bl.	---	2
87	15.5	---	4	1,568	834	185	145	125	111	d. br.	l. br.	4	2
88	15.7	H. S.	3	1,520	801	186	146	126	103	br.	g. bl.	4	1
89	15.3	---	9	1,576	810	196	148	121	104	d. br.	gr.	5	3
90	15.0	---	6	1,511	846	186	144	127	108	l. br.	bl.	1	5
91	15.10	---	1	1,589	801	179	151	128	96	bl.	d. br.	2	1
92	15.8	---	2	1,640	879	176	143	130	128	d. br.	gr.	1	1
93	15.4	---	1	1,582	871	189	150	131	97	d. blo.	gr.	2	---
94	15.3	---	2	1,655	884	192	142	127	118	l. br.	g. bl.	1	---
95	15.3	---	5	1,530	766	173	147	125	82	d. br.	g. br.	4	1
96	15.11	---	3	1,548	845	184	147	128	112	l. br.	g. bl.	2	---
97	15.7	---	6	1,567	853	187	148	133	107	d. br.	d. br.	4	3
98	15.7	---	1	1,544	841	180	141	126	97	red br.	gr.	2	1
99	15.6	---	1	1,621	816	183	136	130	95	bla.	br.	---	2
100	15.4	9	1	1,620	---	186	150	132	---	d. blo.	gr.	1	---
101	15.4	9	1	1,500	---	195	150	130	---	d. br.	g. bl.	4	4
102	15.6	9	5	1,566	---	183	146	121	---	d. br.	bl.	4	2
103	15.1	9	4	1,642	---	186	144	131	---	d. br.	d. br.	6	2
104	15.7	8	1	1,522	---	177	144	122	---	d. br.	l. br.	---	---
105	15.0	7	3	1,388	---	181	133	120	---	d. br.	g. bl.	1	1
106	15.0	7	1	1,609	---	180	141	127	---	d. br.	g. bl.	---	---
107	15.2	4	3	1,390	744	177	141	119	---	l. br.	g. bl.	---	2
108	15.1	8	8	1,698	894	178	143	129	---	d. br.	g. bl.	4	3
109	15.9	9	2	1,598	870	187	143	125	105	d. br.	l. br.	1	---
110	15.6	9	4	1,488	---	187	144	121	98	d. br.	bl.	3	1
111	15.3	8	3	1,615	---	180	139	122	103	d. br.	gr.	3	1

a Stepsister.

15-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL SERIES.

Number.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
112	15.9	3	1,480	800	400	71	100

REPEATED MEASUREMENTS.

Number in 14-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 14-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
6	15.2	9	1.613	856	432	70	118	37	15.7	8	1.492	785	425	70	89
8	15.7	9	1.673	880	441	76	117	46	15.7	9	1.627	850	465	77	157
9	15.10	9	1.650	892	438	74	113	47	15.3	9	1.529	825	420	75	91
11	15.9	9	1.632	902	430	73	116	48	15.3	---	1.529	805	415	73	99
12	15.5	9	1.606	817	420	73	111	50	15.8	8	1.605	820	430	73	88
14	15.9	9	1.541	812	418	76	97	52	15.6	---	1.450	795	380	69	91
16	15.5	8	1.605	810	450	111	56	56	15.1	9	1.473	751	425	72	109
17	15.3	8	1.698	890	481	82	123	57	15.2	8	1.535	805	420	71	92
18	15.2	8	1.462	765	380	70	100	58	15.2	8	1.564	850	410	71	113
20	15.8	8	1.632	838	441	76	122	63	15.6	9	1.614	835	445	73	103
23	15.8	8	1.632	870	447	77	97	64	15.10	8	1.633	820	435	71	89
24	15.2	7	1.575	825	450	101	101	65	15.11	9	1.616	845	430	73	97
27	15.2	9	1.639	900	435	79	144	70	15.6	8	1.580	815	425	70	127
28	15.6	9	1.465	810	410	75	100	73	15.5	9	1.543	840	410	77	91
30	15.8	9	1.575	855	430	77	105	74	15.6	7	1.542	825	455	---	124
34	15.6	8	1.602	865	430	78	117	76	15.2	9	1.559	875	415	75	111
36	15.0	8	1.476	770	380	68	68								

Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 13-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
7 -----	15.1	9	1,446	772	398	75	83	83 -----	15.0	9	1,616	860	430	75	96

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
48	1,585	112			
49	1,673	114			
50	1,527	103			
51	1,357	106			
52	1,477	105			
53	1,590	105			
54	1,616	107			
55	1,616	107			
56	1,600	114			
57	1,679	103			
58	1,665	101			
59	1,612	102			
60	1,506	101			
61	1,635	106			
62	1,580	110			
63	1,517	106			
64	1,577	102			
65	1,637	114			
66	1,476	100			
67	1,586	104			
68	1,604	103			
69	1,575	114			
70	1,600	102			
71	1,622	107			
72	1,641	103			
73	1,504	112			
74	1,624	101			
75	1,589	106			
76	1,626	101			
77	1,570	111			
78	1,410	97			
79	1,558	108			
80	1,639	113			
81	1,586	103			
82	1,584	104			
83	1,664	110			
84	1,597	100			
85	1,680	95			
86	1,544	102			
87	1,515	106			
88	1,572	105			
89	1,594	112			
90	1,471	104			
91	1,690	106			
92	1,618	117			
93	1,560	108			
94	1,638	103			
95	1,590	103			
96	1,559	118			
97	1,577	110			
98	1,530	100			
99	1,655	106			
107	1,425	107	157		
108		113	120	75	
109		109	161	76	420
110		102	160	70	390
111		100	160	79	440

16-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.	16.9		4	1,642	859	186	142	131	115	br.	gr.	4	
2.	16.3	9	5	1,596	841	186	139	118	117	l. br.	bl.	4	4
3.	16.6		1	1,553	830	188	148	125	104	br.	l. bl.	1	
4.	16.8		5	1,525	827	193	152	124	96	l. br.	br.	2	2
5.	16.9		4	1,607	840	181	140	127	123	aub.	br.	1	
6.	16.8		4	1,595	834	179	144	117	92	d. br.	bl.	1	
7.	16.2	9	5	1,520	817	184	143	128	99	blo.	g. bl.	1	3
8.	16.7		2	1,602	841	171	136	125	102	blo.	d. br.	3	1
9.	16.0		1	1,510	792	174	136	120	103	aub.	d. br.	3	1
10.	16.10	9	2	1,580	853	189	152	135	128	d. br.	d. br.		1
11.	16.2	9	4	1,549	867	183	144	129	111	br.	d. br.	3	
12.	16.6	9	4	1,483	784	177	143	129	101	br.	bl.	3	1
13.	16.2	9	6	1,515	818	183	146	127	94	bla.	l. br.	3	
14.	16.1	8	2	1,544	781	177	141	124	96	d. br.	br.	1	3
15.	16.0	8	4	1,482	788	185	141	122	90	br.	bl.	2	
16.	16.0	8	1	1,494	792	182	143	127	86	d. br.	br.		
17.	16.0	8	1	1,591	840	188	136	124	110	d. br.	bl.	6	
18.	16.1	9	1	1,560	826	185	140	125	105	blo.	g. bl.	1	1
19.	16.9	9	1	1,503	803	182	141	122	92	d. blo.	bl.		4
20.	16.3	6	4	1,514	815	165	130	123	94	l. br.	l. br.	1	1
21.	16.0	8	3	1,542	777	193	145	125	94	l. br.	l. br.	1	
22.	16.6	8	2	1,515	795	180	136	120	110	br.	bl.	1	1
23.	16.6	8	2	1,504	828	180	144	122	108	d. br.	l. br.	1	
24.	16.3	9	7	1,592	846	187	144	124	108	br.	g. bl.	1	5
25.	16.0		2	1,596	844	184	142	122	113			2	
26.	16.8		1	1,591	856	184	136	117	100				
27.	16.10	H. J. 2d yr.	N	1,630	891	194	147	128	126	br.	br.	1	
28.	16.7	H. J. 2d yr.	N	1,650	886	183	146	129	158	l. br.	bl.		2
29.	16.6	H. J. 2d yr.	N	1,613	874	188	146	124	111	br.	g. bl.	1	
30.	16.11	H. J. 2d yr.	N	1,606	875	182	148	128	123	d. br.	g. bl.		1
31.	16.9	H. J. 2d yr.	N	1,579	847	185	142	127	104	br.	gr.	1	
32.	16.10	H. J. 2d yr.	N	1,646	872	188	142	124	122	l. br.	gr.	1	
33.	16.2	H. J. 2d yr.	1	1,567	848	181	149	149	113	l. br.	bl.		2
34.	16.2	H. J. 2d yr.	2	1,527	816	194	146	129	99	d. br.	bl.		1
35.	16.5	H. J. 2d yr.	2	1,580	824	193	148	128	114	br.	g. bl.	3	
36.	16.8	H. J. 2d yr.	5	1,616	850	181	141	124	107	d. br.	d. br.	2	1
37.	16.1	H. J. 2d yr.	3	1,656	850	176	148	137	123	br.	gr.	2	
38.	16.10	2d yr.	4	1,683	910	190	150	130	132	d. br.	d. br.	2	
39.	16.11	H. J. 2d yr.	3	1,650	849	190	149	130	113	d. br.	d. br.	1	1
40.	16.11	H. J. 2d yr.	2	1,710	914	180	145	125	130	d. br.	br.		
41.	16.6	H. J. 2d yr.	1	1,581	813	184	145	128	112	aub.	d. br.	3	1
42.	16.5	2d yr.	5	1,501	799	175	142	125	82	br.	bl.	5	
43.	16.11	H. S.	1	1,575	854	184	148	131	119	d. br.	br.	2	1
44.	16.2	2d yr.		1,589	834	194	147	130	114	d. br.	gr.	1	
45.	16.6	2d yr.	3	1,547	808	179	136	118	94	l. br.	br.	1	1
46.	16.3	H. S.	1	1,530	836	184	150	129	97	l. br.	l. br.		
47.	16.6	2d yr.	3	1,492	827	191	145	130	118				
48.	16.9	2d yr.	4	1,492	806	184	145	122	92	l. br.	gr.	3	1
49.	16.7	2d yr.	2	1,605	842	184	147	129	109	br.	g. bl.	2	
50.	16.11	2d yr.	8	1,580	857	185	142	121	117	d. br.	br.	6	2
51.	16.1	H. S.	1	1,566	845	186	145	128	109	bla.	d. br.	1	1
52.	16.10	2d yr.	3	1,584	845	188	150	134	113	br.	br.	1	1
53.	16.4	H. S.	1	1,643	899	182	149	127	115	d. br.	gr.	1	2
54.	16.7	2d yr.	1	1,524	816	179	140	128	109	br.	bl.		
55.	16.11	H. S.	2	1,484	790	174	139	120	74	red br.	gr.	1	2
56.	16.0	2d yr.	2	1,597	844	181	132	120	97	d. br.	d. br.	1	
57.	16.0	2d yr.	2	1,526	790	183	149	132	99	d. br.	d. br.		1
58.	16.0	2d yr.	1	1,596	840	181	145	127	114	br.	gr.	1	
59.	16.9	2d yr.	2	1,580	872	183	149	130	111	l. br.	gr.		7
60.	16.9	2d yr.	1	1,557	835	185	145	127	117	d. blo.	g. bl.	1	
61.	16.3	1st yr.	4	1,600	856	184	141	122	97	l. br.	bl.		
62.	16.0	1st yr.	5	1,572	859	184	146	126	111	d. br.	gr.	4	5
63.	16.3	1st yr.	1	1,515	806	182	140	122	99	d. br.	br.		
64.	16.10	H. S.	1	1,562	846	188	151	124	111	d. br.	d. br.	2	1
65.	16.2	H. S.	1	1,653	829	179	143	126	103	br.	gr.		3
66.	16.8	H. S.	2	1,537	832	186	149	122	95	d. br.	br.	3	2
67.	16.5	H. S.	1	1,725	884	195	152	131	135	d. br.	br.		5
68.	16.4	H. S.	2	1,517	803	172	144	124	96	d. br.	d. br.	2	1
69.	16.5	H. S.	1	1,674	903	185	142	133	153	br.	g. bl.	1	3
70.	16.7	H. S.	5	1,519	816	186	144	123	107	d. blo.	g. bl.	1	1
71.	16.6	H. S.	4	1,627	838	187	147	126	109	br.	gr.	2	4
72.	16.3	H. S.	7	1,513	843	179	143	130	123	d. br.	bl.	2	1
73.	16.4	H. S.	3	1,666	887	190	153	132	117	br.	br.	1	2
74.	16.9		1	1,454		191	152	123		d. blo.	gr.	2	
75.	16.2	H. S.	2	1,492	792	177	147	127	102	d. br.	gr.	1	
76.	16.4	H. S.	2	1,616	807	193	151	131	115	d. br.	d. br.		1
77.	16.1	H. S.	1	1,565	830	188	150	137	111	d. br.	d. br.		
78.	16.7	H. S.	1	1,563	842	182	153	124	105	d. br.	bl.		
79.	16.1	H. S.	3	1,579	851	192	151	130	123	d. br.	bl.	2	2
80.	16.2	8	8	1,538	817	171	147	127		d. br.	gr.	2	3

16-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
81.....	16.3	H. S.	3	1,608	868	193	149	132	114	br.	gr.	2	2
82.....	16.6	H. S.	1	1,643	867	181	150	130	110	br.	gr.		
83.....	16.0	H. S.	3	1,548	845	184	147	128	112	l. br.	gr. bl.	2	
84.....	16.1	H. S.	1	1,606	855	171	149	125	102	d. br.	gr.		1
85.....	16.4	H. S.	1	1,550	845	192	148	129	108	br.	gr.		
86.....	16.6	9	1	1,561		175	135	122		d. br.	l. br.		
87.....	16.5	9	12	1,630		187	144	131		d. blo.	bl.	5	3
88.....	16.0	9	1	1,533		181	146	127		blo.	bl.	1	2
89.....	16.7	9	1	1,458		181	142	124		d. br.	gr. bl.	1	1
90.....	16.2	8	5	1,467		186	148	124		d. br.	l. br.	3	3
91.....	16.4	9	2	1,478	865	180	140	121	91	d. br.	l. br.	1	1

REPEATED MEASUREMENTS.

Number in 15-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.	Number in 15-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
5.....	15.11	9	1,620	866	430	77	113	24.....	16.6	9	1,550	820	435	75	98
9.....	16.11	9	1,608	850	425	71	116	27.....	16.3	9	1,604	810	440	76	105
11.....	16.3	8	1,633	866	452	77	127	37.....	16.5	9	1,584	880	390	81	97
14.....	16.11	9	1,630	895	445	80	133	38.....	16.10	9	1,501	830	390	72	111
15.....	16.3	9	1,559	845	410	70	95	39.....	16.6	9	1,528	825	410	69	91
21.....	16.8	9	1,525	830	400	72	114	41.....	16.9	9	1,639	885	435	73	113
22.....	16.6		1,554	805	420	73	116	44.....	16.1	8	1,638	845	440	72	113
23.....	16.1	9	1,632	865	445	77	114								

Number in 14-year series.	Age.	Grade.	Stature.	Height sitting.	Forearm.	Breadth of hand.	Weight.
22.....	16.2	9	1,626	875	434	72	133

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
25.....	1,626	106				48.....	1,576	95			
26.....	1,620	111				49.....	1,600	109			
27.....	1,670	107				50.....	1,536	108			
28.....	1,684	117				51.....	1,620	114			
29.....	1,610	105				52.....	1,592	108			
30.....	1,615	105				53.....	1,644	114			
31.....	1,556	105				54.....	1,579	101			
32.....	1,644	101				55.....	1,472	110			
33.....	1,580	114				56.....	1,605	94			
34.....	1,536	104				57.....	1,595	107			
35.....	1,629	106				58.....	1,639	94			
36.....	1,679	108				59.....	1,618	100			
37.....	1,684	101				60.....	1,580	97			
38.....	1,604	115				61.....	1,582	100			
39.....	1,610	111				62.....	1,549	109			
40.....	1,678	101				63.....	1,530	106			
41.....	1,600	114				64.....	1,535	109			
42.....	1,568	109				65.....	1,674	105			
43.....	1,624	106				66.....	1,552	101			
44.....	1,615	113				67.....	1,759	111			
45.....	1,542	103				68.....	1,546	93			
46.....	1,522	108				69.....	1,639	113			
47.....	1,526	103				70.....	1,566	97			

16-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS—Continued.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.	Number.	Finger reach.	Height of face (1).	Height of face (2).	Breadth of hand.	Forearm.
71	1,616	101	-----	-----	-----	79	1,610	108	-----	-----	-----
72	1,548	96	-----	-----	-----	80	-----	100	-----	-----	-----
73	1,640	114	-----	-----	-----	81	1,594	105	-----	-----	-----
74	-----	102	167	70	-----	82	1,651	107	-----	-----	-----
75	1,476	94	-----	-----	-----	83	1,559	-----	-----	-----	-----
76	1,642	108	-----	-----	-----	84	1,619	109	-----	-----	-----
77	1,558	110	-----	-----	-----	85	1,569	104	-----	-----	-----
78	1,518	117	-----	-----	-----	91	-----	99	158	69	385

17-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	17.3	-----	1	1,622	860	186	140	126	113	br.	bl.	2	1
2	17.1	-----	2	1,565	851	178	144	127	114	bla.	d. br.	1	3
3	17.6	-----	4	1,623	877	183	143	131	121	br.	gr.	2	2
4	17.4	-----	2	1,605	899	187	140	121	114	d. br.	br.	-----	1
5	17.5	-----	2	1,576	869	182	144	123	111	blo.	bl.	3	3
6	17.4	-----	9	1,651	920	183	145	128	-----	br.	gr.	6	2
7	17.8	-----	2	1,661	866	176	147	128	-----	bla.	gr.	1	-----
8	17.11	-----	5	1,558	874	186	148	124	-----	blo.	l. br.	3	2
9	17.4	-----	1	1,580	833	186	146	132	-----	br.	br.	2	-----
10	17.2	-----	3	1,584	830	187	146	125	105	d. br.	g. br.	1	2
11	17.9	-----	9	1,540	870	178	150	131	99	br.	g. bl.	7	-----
12	17.0	-----	9	1,637	880	184	150	134	113	br.	gr.	2	5
13	17.5	-----	1	1,592	862	182	141	124	115	blo.	bl.	-----	-----
14	17.6	-----	2	1,642	882	201	147	134	145	br.	bl.	2	2
15	17.0	-----	3	1,611	872	190	147	129	144	blo.	g. bl.	1	3
16	17.7	-----	2	1,601	832	178	137	127	118	d. br.	gr.	3	-----
17	17.10	-----	-----	1,622	866	191	147	125	-----	blo.	g. bl.	-----	-----
18	17.0	-----	3	1,633	881	185	149	129	129	d. br.	gr.	1	1
19	17.7	H. S.	6	1,517	814	187	151	127	103	br.	g. bl.	3	3
20	17.6	H. S.	4	1,627	843	181	141	128	104	l. br.	d. br.	-----	3
21	17.7	H. S.	1	1,734	875	188	151	119	133	d. br.	d. br.	-----	-----
22	17.6	H. S.	1	1,573	818	184	147	131	105	d. br.	l. br.	1	1
23	17.0	H. S.	1	1,651	855	192	138	125	107	br.	l. br.	1	-----
24	17.2	Jr.	1	1,533	816	184	145	127	126	d. br.	g. bl.	2	1
25	17.2	Jr.	1	1,583	840	190	152	129	118	d. br.	bl.	1	-----
26	17.5	4 H. S.	9	1,606	875	189	153	135	120	red br.	br.	2	3
27	17.5	H. S.	2	1,553	843	183	135	116	103	br.	br.	-----	2
28	17.7	H. S.	6	1,648	910	185	147	138	142	br.	g. bl.	2	3
29	17.8	H. S.	2	1,602	873	194	147	127	108	l. br.	g. bl.	1	2
30	17.3	H. S.	2	1,551	824	199	143	128	113	red br.	g. bl.	-----	1
31	17.7	H. S.	1	1,614	832	181	143	127	92	d. br.	l. br.	1	-----
32	17.11	H. S.	1	1,564	842	184	146	126	109	br.	d. br.	3	-----
33	17.11	H. S.	3	1,490	809	172	142	121	94	l. br.	g. bl.	1	-----
34	17.4	H. S.	3	1,580	845	188	151	132	154	d. br.	bl.	3	1
35	17.0	H. S.	1	1,493	813	184	145	121	97	br.	gr.	-----	-----
36	17.6	H. S.	6	1,575	840	181	146	135	117	d. br.	l. br.	6	-----
37	17.9	H. S.	-----	1,616	890	181	143	131	128	d. br.	d. br.	-----	2
38	17.5	H. S.	3	1,624	839	188	144	130	134	d. br.	gr.	3	1
39	17.11	H. S.	3	1,638	865	192	142	124	116	br.	br.	1	1
40	17.9	H. S.	1	1,604	834	180	135	121	100	d. br.	d. br.	1	-----
41	17.6	H. S.	5	1,623	836	182	142	124	95	d. br.	g. bl.	2	3
42	17.6	H. S.	1	1,530	830	188	154	128	104	d. br.	g. bl.	-----	-----
43	17.1	H. S.	1	1,530	816	185	146	121	114	d. br.	d. br.	-----	1
44	17.8	H. S.	2	1,727	894	194	139	123	142	br.	bl.	3	-----
45	17.3	H. S.	1	1,648	826	195	145	132	134	d. blo.	gr.	1	-----
46	17.8	2d yr.	2	1,555	892	185	146	125	116	br.	g. bl.	-----	1
47	17.0	H. S.	1	1,675	854	184	148	131	119	d. br.	br.	2	1
48	17.1	2d yr.	3	1,528	844	178	144	127	115	d. br.	bl.	3	1
49	17.1	H. S.	1	1,682	876	183	150	128	115	br.	yr.	1	1
50	17.0	2d yr.	1	1,670	880	179	147	136	118	d. br.	yr.	-----	-----
51	17.5	H. S.	2	1,589	842	180	145	126	101	d. br.	d. br.	1	-----
52	17.1	H. S.	6	1,585	816	192	152	125	105	d. br.	yr.	2	3
53	17.0	H. S.	4	1,484	730	174	139	120	74	red br.	yr.	1	2

* Twin.

17-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
54.....	17.0	2d yr.	2	1,502	794	193	147	123	100	l. br.	g. bl.	1	1
55.....	17.5	H. S.	2	1,652	886	191	152	130	136	br.	d. br.	1	2
56.....	17.7	2d gr.	5	1,472	812	186	151	131	115	d. br.	br.	3	3
57.....	17.8	H. S.	3	1,522	846	176	142	123	107	d. br.	g. bl.	3	1
58.....	17.1	2d gr.	3	1,592	835	181	140	123	114	br.	g. bl.	1	1
59.....	17.0	H. S.	2	1,540	839	179	147	127	111	br.	bl.	1	1
60.....	17.4	2d gr.	2	1,593	876	180	146	123	127	d. br.	d. br.	3	3
61.....	17.1	1st gr.	2	1,587	856	185	150	130	133	br.	g. bl.	1	1
62.....	17.6	H. S.	1	1,578	850	189	140	123	107	l. br.	d. br.	1	1
63.....	17.2	H. S.	1	1,575	842	193	147	126	112	d. br.	d. br.	1	1
64.....	17.8	H. S.	2	1,576	837	180	148	131	110	br.	bl.	4	3
65.....	17.11	H. S.	1	1,633	862	183	142	125	121	br.	bl.	2	1
66.....	17.7	H. S.	3	1,604	842	183	140	129	123	red br.	l. br.	2	2
67.....	17.2	H. S.	1	1,586	848	185	138	124	108	d. br.	g. bl.	1	1
68.....	17.3	H. S.	2	1,488	803	178	142	129	97	d. br.	bl.	3	1
69.....	17.6	H. S.	5	1,610	845	183	143	117	100	d. br.	bl.	1	2

* Stepbrother.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
7.....	1,682	97	.....	28.....	1,649	102	.....	49.....	1,752	109	.....
8.....	1,509	110	.....	29.....	1,565	113	.....	50.....	1,713	108	.....
9.....	1,568	101	.....	30.....	1,615	110	.....	51.....	1,547	105	.....
10.....	1,682	112	.....	31.....	1,611	106	.....	52.....	1,605	107	.....
11.....	1,525	106	.....	32.....	1,591	119	.....	53.....	1,472	110	.....
12.....	1,638	116	.....	33.....	1,499	109	.....	54.....	1,512	107	.....
13.....	1,531	109	.....	34.....	1,574	108	.....	55.....	1,603	106	.....
14.....	1,622	116	.....	35.....	1,486	113	.....	56.....	1,434	102	.....
15.....	1,619	107	.....	36.....	1,625	112	.....	57.....	1,560	110	.....
16.....	1,617	111	.....	37.....	1,622	116	.....	58.....	1,683	93	.....
17.....	1,694	70	111	38.....	1,672	114	.....	59.....	1,648	106	.....
18.....	1,642	104	.....	39.....	1,680	110	.....	60.....	1,564	110	.....
19.....	1,549	107	.....	40.....	1,562	104	.....	61.....	1,583	103	.....
20.....	1,695	114	.....	41.....	1,544	116	.....	62.....	1,527	110	.....
21.....	1,790	108	.....	42.....	1,555	102	.....	63.....	1,618	111	.....
22.....	1,613	104	.....	43.....	1,540	104	.....	64.....	1,610	103	.....
23.....	1,713	108	.....	44.....	1,753	114	.....	65.....	1,612	98	.....
24.....	1,540	105	.....	45.....	1,642	97	.....	66.....	1,608	105	.....
25.....	1,599	111	.....	46.....	1,659	110	.....	67.....	1,555	104	.....
26.....	1,673	114	.....	47.....	1,624	106	.....	68.....	1,490	111	.....
27.....	1,570	98	.....	48.....	1,535	108	.....	69.....	1,660	104	.....

18-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	18.8	N. S. a	1	1,623	846	191	145	129	.....	red.	g. bl.	1	4
2.....	18.1	N. S. a	5	1,729	908	186	155	134	.....	br.	g. bl.	3	4
3.....	18.11	N. S. a	1	1,637	884	191	150	132	.....	br.	br.	3	4
4.....	18.2	N. S. a	1	1,663	863	180	147	129	.....	br.	g. br.	1	2
5.....	18.9	N. S. a	1	1,630	901	184	145	124	.....	br.	g. bl.	1	2
6.....	18.6	N. S. a	4	1,622	887	186	145	124	.....	br.	bl.	2	2
7.....	18.0	N. S. a	9	1,544	815	183	140	120	.....	l. br.	bl.	4	5
8.....	18.1	N. S. a	7	1,598	870	187	143	130	.....	d. br.	d. br.	4	2
9.....	18.7	N. S. a	8	1,628	841	191	145	130	.....	br.	bl.	6	2
10.....	18.8	N. S. a	6	1,665	833	179	138	125	.....	red.	bl.	4	2

a Normal School.

18-year-old girls. Worcester, Mass.—Continued.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
11.....	18.9	N.	5	1,665	842	179	146	131	-----	bla.	gr.	1	2
12.....	18.9	N.	5	1,658	908	185	141	130	-----	red.	bl.	3	3
13.....	18.8	N.	1	1,657	861	186	144	124	100	d. br.	bl.	3	3
14.....	18.3	N.	3	1,503	820	181	140	118	94	red.	gr.	2	2
15.....	18.10	N.	2	1,593	849	180	150	125	112	br.	bl.	1	---
16.....	18.4	N.	4	1,578	873	192	142	121	108	br.	gr.	3	---
17.....	18.0	N.	1	1,572	860	178	145	129	140	br.	bl.	---	---
18.....	18.0	N.	1	1,502	814	171	152	133	111	red.	bl.	2	1
19.....	18.0	N.	3	1,622	876	187	144	132	119	---	---	4	1
20.....	18.9	N.	2	1,557	903	191	150	126	115	blo.	br.	2	---
21.....	18.5	N.	8	1,591	878	187	146	138	154	d. br.	br.	6	4
22.....	18.6	N.	1	1,562	851	190	150	130	115	br.	bl.	---	1
23.....	18.2	N.	4	1,534	856	186	148	128	111	br.	g. bl.	1	2
24.....	18.3	-----	1	1,615	890	187	140	130	127	br.	bl.	1	3
25.....	18.4	-----	2	1,550	836	184	155	131	113	blo.	bl.	1	1
26.....	18.7	N.	3	1,575	848	189	144	126	119	d. br.	g. bl.	3	2
27.....	18.5	N.	3	1,542	814	180	140	125	113	blo.	g. bl.	2	4
28.....	18.5	N.	3	1,602	844	184	146	130	125	br.	gr.	5	3
29.....	18.8	N.	2	1,586	816	195	150	142	148	d. br.	br.	4	2
30.....	18.7	H.	3	1,547	803	178	138	127	117	d. br.	gr.	---	1
31.....	18.1	H.	2	1,645	845	190	145	126	127	br.	gr.	1	---
32.....	18.0	H.	1	1,511	806	188	148	131	100	d. br.	gr.	---	1
33.....	18.11	H.	2	1,665	890	194	147	126	113	red br.	g. bl.	---	6
34.....	18.3	H.	2	1,676	876	192	152	137	141	br.	bl.	2	1
35.....	18.11	H.	1	1,555	862	184	148	128	113	br.	bl.	1	1
36.....	18.8	Sen.	2	1,588	872	192	160	137	128	l. br.	br.	---	---
37.....	18.4	H.	1	1,567	827	193	152	132	140	l. br.	d. br.	1	4
38.....	18.4	H.	1	1,607	863	185	146	125	129	bla.	br.	---	---
39.....	18.1	H.	3	1,574	842	182	144	124	111	blo.	gr.	---	2
40.....	18.3	H.	1	1,510	853	182	148	130	101	d. br.	bl.	---	---
41.....	18.0	H.	2	1,563	853	190	152	131	110	br.	br.	2	---
42.....	18.7	H.	2	1,640	930	187	151	135	135	br.	br.	2	1
43.....	18.4	H.	5	1,612	862	186	148	130	125	br.	l. br.	2	5
44.....	18.3	H.	1	1,538	819	183	152	129	104	d. br.	bl.	---	---
45.....	18.4	H.	2	1,603	873	190	148	131	128	br.	gr.	5	---
46.....	18.7	2d. yr.	3	1,540	815	184	145	130	119	l. br.	gr.	1	2
47.....	18.4	2d. yr.	4	1,649	880	190	155	130	130	l. br.	g. bl.	2	1
48.....	18.2	H.	2	1,582	844	184	149	129	119	d. br.	bl.	2	3
49.....	18.3	8	1	1,496	802	180	144	125	-----	d. br.	gr.	1	---

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
2.....	1,746	112	-----	22.....	1,610	110	-----	36.....	1,597	116	-----
3.....	1,613	116	-----	23.....	1,525	112	-----	37.....	1,577	101	-----
4.....	1,707	-----	-----	24.....	1,545	100	-----	38.....	1,597	106	-----
10.....	1,640	109	-----	25.....	1,594	106	-----	39.....	1,605	109	-----
11.....	1,685	106	-----	26.....	1,605	110	-----	40.....	1,477	100	-----
13.....	1,699	114	-----	27.....	1,563	118	-----	41.....	1,557	108	-----
14.....	1,562	104	-----	28.....	1,635	106	-----	42.....	1,670	112	-----
15.....	1,533	113	-----	29.....	1,764	118	-----	43.....	1,641	98	-----
16.....	1,574	103	-----	30.....	1,560	104	-----	44.....	1,614	110	-----
17.....	1,600	109	-----	31.....	1,710	111	-----	45.....	1,588	105	-----
18.....	1,536	101	-----	32.....	1,535	100	-----	46.....	1,551	109	-----
19.....	1,622	108	-----	33.....	1,656	103	-----	47.....	1,652	117	-----
20.....	1,605	105	-----	34.....	1,720	98	-----	48.....	1,608	103	-----
21.....	1,585	110	-----	35.....	1,500	109	-----	49.....	-----	107	153

19-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	19.0	N.	2	1,543	830	185	147	130	-----	blo.	g.g.	-----	-----
2	19.7	N.	2	1,567	848	193	143	131	-----	blo.	g.g.	-----	-----
3	19.6	N.	2	1,497	810	186	145	125	-----	blo.	g.g.	-----	-----
4	19.0	N.	2	1,560	815	190	145	126	-----	blo.	g.g.	-----	-----
5	19.2	N.	2	1,506	-----	186	141	121	-----	gold.	g.g.	-----	-----
6	19.7	N.	4	1,566	850	175	141	125	100	d. br.	gr.	1	2
7	19.6	N.	2	1,519	823	182	142	123	-----	bla.	br.	3	1
8	19.1	N.	9	1,619	836	185	151	130	-----	ed.	br.	8	-----
9	19.5	N.	4	1,583	863	179	146	126	-----	br.	l. br.	6	2
10	19.4	N.	3	1,675	871	192	156	136	-----	d. br.	g. br.	2	2
11	19.4	N.	6	1,532	831	177	151	128	-----	br.	gr.	5	3
12	19.11	N.	4	1,617	871	189	141	131	-----	br.	bl.	3	1
13	19.6	N.	1	1,586	845	191	147	133	-----	l. br.	gr.	2	2
14	19.4	N.	1	1,725	929	183	153	136	-----	br.	bl.	2	-----
15	19.4	N.	6	1,629	860	167	144	125	-----	br.	bl.	1	4
16	19.10	N.	1	1,638	854	182	142	132	-----	br.	g. bl.	2	-----
17	19.8	N.	3	1,565	848	174	143	132	-----	l. br.	gr.	-----	2
18	19.2	N.	4	1,603	843	181	150	129	-----	br.	gr.	4	-----
19	19.5	N.	1	1,529	786	183	146	130	-----	d. br.	bl.	-----	-----
20	19.6	N.	1	1,561	831	190	151	134	-----	d. br.	d. br.	-----	1
21	19.9	N.	3	1,596	856	176	136	119	-----	br.	br.	1	3
22	19.8	N.	1	1,476	803	181	144	122	-----	blo.	bl.	3	2
23	19.5	N.	7	1,591	823	176	144	129	-----	d. br.	g. bl.	3	3
24	19.3	N.	4	1,558	832	181	145	126	-----	d. br.	d. br.	4	9
25	19.9	N.	1	1,532	830	178	140	126	-----	blo.	g. bl.	4	2
26	19.6	N.	1	1,596	841	177	147	128	-----	d. br.	g. bl.	3	5
27	19.9	N.	6	1,549	850	180	141	130	-----	blo.	gr.	4	2
28	19.9	N.	1	1,602	868	182	149	129	-----	blo.	bl.	1	-----
29	19.6	N.	2	1,517	793	179	146	125	-----	br.	gr.	1	1
30	19.5	N.	1	1,467	826	182	144	127	-----	br.	g. bl.	-----	-----
31	19.5	N.	4	1,617	874	182	144	126	110	blo.	bl.	1	2
32	19.2	N.	3	1,549	863	185	153	134	120	blo.	bl.	2	2
33	19.7	N.	7	1,664	923	180	152	134	121	r. br.	gr.	2	5
34	19.3	N.	3	1,694	944	181	145	127	137	rd.	g. bl.	5	-----
35	19.2	N.	4	1,583	884	189	148	131	126	l. br.	bl.	1	5
36	19.11	N.	1	1,600	871	187	144	127	114	l. br.	bl.	1	2
37	19.1	H.	1	1,597	848	176	157	136	118	br.	d. br.	-----	-----
38	19.0	H.	3	1,616	870	185	142	125	110	br.	l. br.	-----	-----
39	19.0	H.	3	1,598	865	183	137	123	117	d. br.	g. bl.	3	-----
40	19.1	H.	2	1,559	841	184	145	124	132	br.	g. bl.	2	-----
41	19.11	H.	2	1,627	893	182	152	137	124	br.	br.	1	1
42	19.6	H.	1	1,648	882	192	145	128	122	br.	d. br.	-----	4
43	19.6	H.	1	1,550	827	187	145	127	100	d. br.	d. br.	2	1
44	19.0	H.	6	1,565	824	190	144	124	107	br.	br.	-----	4
45	19.6	H.	2	1,522	840	188	141	126	103	br.	d. br.	1	-----
46	19.0	H.	6	1,559	850	173	143	123	110	br.	bl.	3	4
47	19.6	H.	-----	1,566	857	188	141	125	106	br.	br.	3	2

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
1	1,563	65	103	28	1,555	103	-----	39	1,592	106	-----
2	1,579	66	104	31	1,557	105	-----	40	1,590	110	-----
3	1,511	110	-----	32	1,544	108	-----	41	1,641	107	-----
4	1,599	114	-----	33	1,692	113	-----	42	1,668	110	-----
5	1,520	109	-----	34	1,597	115	-----	43	1,627	106	-----
9	1,616	112	-----	35	1,600	108	-----	44	1,624	108	-----
12	1,634	117	-----	36	1,572	120	-----	45	1,512	102	-----
18	1,635	109	-----	37	1,644	117	-----	46	1,580	106	-----
25	1,541	110	-----	38	1,619	106	-----	47	1,531	104	-----

20-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	20.0	N. S.	.....	1,638	881	184	150	132	.....	l. br.	l. br.	.....	.....
2.....	20.11	N. S.	.....	1,569	834	192	145	123	.....	blo.	g. bl.	.....	.....
3.....	20.0	N. S.	.....	1,612	856	195	142	127	.....	br.	g. bl.	.....	.....
4.....	20.5	N. S.	.....	1,507	832	185	149	131	.....	l. br.	g. bl.	.....	.....
5.....	20.9	N. S.	.....	1,559	870	189	146	124	.....	br.	d. br.	.....	.....
6.....	20.0	N. S.	.....	1,513	.....	189	150	125	.....	br.	g. bl.	.....	.....
7.....	20.6	N. S.	.....	1,617	871	180	146	126	.....	br.	g. bl.	.....	.....
8.....	20.4	N. S.	.....	1,594	846	186	142	118	.....	br.	g. bl.	.....	.....
9.....	20.11	N. S.	.....	1,512	829	189	152	134	.....	br.	l. br.	.....	.....
10.....	20.9	N. S.	.....	1,564	834	188	141	128	.....	br.	g. bl.	.....	.....
11.....	20.8	N. S.	.....	1,546	831	181	142	123	.....	d. br.	br.	.....	.....
12.....	20.2	N. S.	.....	1,580	820	179	149	127	.....	d. br.	gr.	2	5
13.....	20.0	N. S.	.....	1,496	820	170	146	123	.....	br.	l. br.	.....	2
14.....	20.0	N. S.	.....	1,554	857	181	144	131	.....	d. br.	br.	5	2
15.....	20.1	N. S.	.....	1,685	900	184	151	131	.....	red.	bl.	5	3
16.....	20.3	N. S.	.....	1,503	800	170	141	127	.....	d. br.	gr.	2	2
17.....	20.2	N. S.	.....	1,576	860	183	152	137	.....	d. br.	g. bl.	4	4
18.....	20.11	N. S.	.....	1,636	854	193	152	138	.....	br.	br.	1	.....
19.....	20.4	N. S.	.....	1,535	822	179	146	125	.....	rd. br.	bl.	3	3
20.....	20.4	N. S.	.....	1,007	858	181	157	135	.....	l. br.	bl.	1	3
21.....	20.5	N. S.	.....	1,565	833	185	141	127	.....	br.	g. bl.	1	1
22.....	20.6	N. S.	.....	1,479	806	173	137	126	.....	d. br.	bl.	5	4
23.....	20.11	N. S.	.....	1,637	877	187	141	127	.....	d. br.	br.	.....	.....
24.....	20.1	N. S.	.....	1,616	876	203	158	142	.....	br.	g. bl.	2	2
25.....	20.5	N. S.	.....	1,061	893	198	144	128	.....	br.	br.	3	3
26.....	20.10	N. S.	.....	1,550	836	180	150	129	.....	blo.	bl.	4	1
27.....	20.0	N. S.	.....	1,625	871	183	152	133	.....	d. br.	br.	2	5
28.....	20.10	N. S.	.....	1,629	844	184	139	126	116	l. br.	br.	3	1
29.....	20.9	N. S.	.....	1,550	892	176	146	128	119	rd. br.	l. br.	a5	b2
30.....	20.0	N. S.	.....	1,453	828	190	149	128	117	br.	g. bl.	5	4
31.....	20.8	N. S.	.....	1,593	826	196	144	131	113	br.	br.	.....	.....
32.....	20.2	N. S.	.....	1,544	845	186	150	131	131	blo.	bl.	4	3
33.....	20.0	N. S.	.....	1,596	879	190	153	129	123	br.	gr.	.....	.....
34.....	20.9	N. S.	.....	1,547	842	183	145	121	111	blo.	bl.	1	1
35.....	20.1	N. S.	.....	1,643	873	184	142	131	127	blo.	g. bl.	.....	.....
36.....	20.0	H. S.	.....	1,563	843	183	150	132	111	bla.	gr.	2	3
37.....	20.1	H. S.	.....	1,466	829	180	141	123	96	br.	d. br.	.....	3

^a Three stepbrothers.^b Stepsisters.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
1.....	1,722	69	108	10.....	1,537	115	.....	31.....	1,598	100	.....
2.....	1,610	114	.....	13.....	1,434	104	.....	32.....	1,534	101	.....
3.....	1,596	111	.....	14.....	1,560	102	.....	33.....	1,616	111	.....
4.....	1,522	106	.....	15.....	1,660	109	.....	34.....	1,568	101	.....
5.....	1,555	75	122	20.....	1,631	106	.....	35.....	1,673	111	.....
6.....	1,478	97	.....	26.....	1,430	113	.....	36.....	1,558	109	.....
7.....	1,616	115	.....	28.....	1,770	113	.....	37.....	1,463	94	.....
8.....	1,671	109	.....	29.....	1,520	110	.....			
9.....	1,583	108	.....	30.....	1,463	105	.....			

21-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	21.0			1,690	817	184	140	121	.....	l. br.	bl.	.....	.....
2.....	21.3			1,650	865	187	146	128	.....	l. br.	bl.	.....	.....
3.....	21.10			1,614	.....	181	147	.....	.....	br.	bl.	.....	.....
4.....	21.7			1,563	845	182	144	122	.....	br.	br.	.....	.....
5.....	21.4			1,537	846	182	145	125	.....	d. br.	bl.	5	3
6.....	21.5		6	1,663	881	183	145	133	.....	d. blo.	bl.	.....	.....
7.....	21.0		1	1,572	863	183	148	125	.....	d. br.	br.	.....	.....
8.....	21.0		1	1,667	872	191	146	133	.....	br.	bl.	.....	1
9.....	21.8		2	1,608	843	186	136	134	.....	blo.	bl.	.....	.....
10.....	21.2		3	1,618	868	188	146	126	.....	l. br.	bl.	.....	3
11.....	21.11		3	1,603	864	182	142	133	.....	br.	bl.	.....	.....
12.....	21.1		3	1,588	863	186	145	122	.....	d. br.	bl.	.....	.....
13.....	21.3		4	1,566	846	177	139	128	.....	blo.	bl.	3	3
14.....	21.8		1	1,623	864	178	140	139	.....	br.	bl.	1	.....
15.....	21.9		1	1,505	822	190	145	112	.....	br.	bl.	.....	2
16.....	21.0		3	1,615	874	184	143	151	105	d. br.	gr.	3	.....

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
1.....	1,620	116	.....	10.....	1,642	102	.....	15.....	1,581	110	.....
2.....	1,667	99	67	12.....	1,593	100	.....	16.....	1,623	101	.....
3.....	1,601	105	.....	13.....	1,607	107	.....			
4.....	1,567	118	.....	14.....	1,588	116	.....			

22-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	22.0			1,664	887	193	146	128	.....	blo.	bl.	.....	.....
2.....	22.0			1,650	877	191	145	121	.....	blo.	bl.	.....	.....
3.....	22.0			1,545	852	180	134	118	.....	l. br.	bl.	.....	.....
4.....	22.0			1,621	864	180	144	132	.....	blo.	bl.	.....	.....
5.....	22.6			1,503	833	183	149	132	.....	blo.	bl.	.....	.....
6.....	22.3			1,612	879	183	150	136	.....	br.	bl.	.....	.....
7.....	22.0		1	1,620	887	179	147	124	.....	l. br.	br.	.....	1
8.....	22.0		6	1,542	828	187	146	133	.....	br.	bl.	.....	6
9.....	22.0		1	1,577	857	190	142	123	.....	l. br.	bl.	.....	.....
10.....	22.6		2	1,668	860	181	149	134	.....	d. br.	bl.	.....	1
11.....	22.3		1	1,554	855	189	139	128	.....	d. br.	d. br.	1	1
12.....	22.9		3	1,569	842	185	140	124	111	br.	bl.	3	3
13.....	22.5		2	1,648	897	201	144	134	138	blo.	br.	.....	.....
14.....	22.9		1	1,652	863	186	143	132	129	blo.	gr. bl.	.....	.....
15.....	22.0		3	1,594	858	183	140	125	96	d. br.	br.	.....	3
16.....	22.9		3	1,503	831	186	150	130	102	d. br.	d. br.	1	1

22-year-old girls. Worcester, Mass.—Continued.

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).	Number.	Finger reach.	Height of face (1).	Height of face (2).
1.....		118		6.....	1,650	69	107	14.....	1,714	115	
2.....	1,664	105		7.....	1,610	107		15.....	1,605	107	
3.....	1,563	66	99	8.....	1,580	106		16.....	1,552	109	
4.....	1,667	107		9.....	1,546	110					
5.....	1,520	70	109	10.....	1,645	118					

23-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Breadth of face.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	23.6	N. S.		1,540	841	179	138	126		br.	g. bl.		
2.....	23.5	N. S.	9	1,612	878	188	151	130		br.	g. br.	5	3
3.....	23.5	N. S.	3	1,584	851	191	151	135		br. gr.	g. br.	1	3
4.....	23.4	N. S.	3	1,602	843	184	145	132	133	br.	g. bl.	3	5
5.....	23.8	N. S.	1	1,625	901	188	143	127	127	d. br.	g. bl.	1	3
6.....	23.8		2	1,645	880	180	154	131	128	d. br.	g. bl.	7	3

ADDITIONAL MEASUREMENTS.

Number.	Finger reach.	Height of face.	Number.	Finger reach.	Height of face.
1.....	1,520	103	5.....	1,614	112
3.....	1,636	102	6.....	1,656	108
4.....	1,645	109			

24-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Height of forehead.	Breadth of face.	Finger reach.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	24.9	N. S.	3	1,539	832	189	138		125			br.	br.	2	1
2.....	24.0	N. S.		1,522	839	187	148	102	126	1,581	119	br.	bl.	2	2

25-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Height of forehead.	Breadth of face.	Finger reach.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1.....	25.7	N. S.	5	1,645	896	193	140	110	130	1,637		br.	g. br.	3	4
2.....	25.8	N. S.	2	1,527	830	181	140	108	125			br.	d. br.	3	

26-year-old girls. Worcester, Mass.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Height of forehead.	Breadth of face.	Finger reach.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	26.4	N. S.	9	1,606	894	193	150	113	123	1,608	132	br.	g. bl.	4	4
2	26.7	N. S.		1,663	913	190	150	108	134	1,617					

27 to 35 year old girls.

Number.	Age.	Grade.	Child.	Stature.	Height sitting.	Length of head.	Breadth of head.	Height of forehead (1).	Height of forehead (2).	Breadth of face.	Finger reach.	Weight.	Hair.	Eyes.	Brothers.	Sisters.
1	27.5		10	1,591	811	191	147	105		129	1,611	104	d. br.	bl.	6	4
1	29.2		2	1,498	780	188	150	66	109	130		101	br.	gr.		1
1	30.0	N. S.		1,661	888	184	150	77	115	129			br. gr.	l. br.		
2	30.7	N. S.		1,626	878	182	149			127	1,634		br.	g. bl.		
3	30.5			1,566	834	180	152	114		130	1,594	128	d. br.	g. br.		
1	32.3		2	1,584	866	188	148	112		134	1,663	149	d. br.	l. br.	1	
1	35.0			1,625		184	151	107		135	1,590		l. br.	g. bl.		

Table of relationship.

BOYS.

Age.	No.	Relationship.	Age.	No.	Relationship.
		<i>Son of—</i>			<i>Brother of—</i>
3-year	1	29-year woman, No. 1.	8-year	1	11-year girl, No. 29.
		<i>Brother of—</i>		(8)	7-year boy, No. 31.
4-year	1	6-year boy, No. 83.		17	14-year girl, No. 9.
5-year	11	13-year boy, No. 78.		18	14-year girl, No. 3.
	12	8-year boy, No. 70; 11-year girl, No. 82; 12-year girl, No. 85.		22	8-year boy, No. 28.
	13	10-year girl, No. 79; 12-year boy, No. 109.		(28)	8-year boy, No. 22.
	15	10-year girl, No. 98; 10-year boy, No. 95.		(48)	6-year boy, No. 31; 10-year girl, No. 43.
6-year	18	12-year girl, No. 103.		59	6-year girl, No. 35; 12-year boy, No. 79.
	17	7-year girl, No. 9.		60	10-year boy, No. 65.
	26	12-year girl, No. 29; 17-year girl, No. 2.		63	14-year girl, No. 52.
	31	8-year boy, No. 48; 10-year girl, No. 43.		(70)	5-year boy, No. 12; 11-year girl, No. 82; 12-year girl, No. 85.
	44	11-year girl, No. 57.		80	5-year girl, No. 25.
	46	8-year girl, No. 57.		(82)	6-year boy, No. 57.
	57	8-year boy, No. 82.		94	10-year girl, No. 106.
	59	7-year boy, No. 94.		95	14-year boy, No. 34.
	60	11-year boy, No. 91.		(96)	6-year boy, No. 81.
	77	8-year girl, No. 83.	9-year	101	10-year boy, No. 116.
	78	9-year girl, No. 69; 13-year boy, No. 126.		105	6-year girl, No. 61.
7-year	81	8-year boy, No. 96.		1	11-year girl, No. 89.
	(83)	4-year boy, No. 1.		3	11-year girl, No. 70; 14-year girl, No. 56.
	14	9-year boy, No. 22.		4	12-year girl, No. 15; 17-year girl, No. 1.
	30	5-year girl, No. 9.		12	9-year boy, No. 13.
	31	8-year boy, No. 8.		(13)	9-year boy, No. 12.
	49	16-year boy, No. 16.		15	14-year boy, No. 24.
	51	13-year boy, No. 42.		(22)	7-year boy, No. 14.
	58	9-year girl, No. 38.		26	5-year girl, No. 4; 11-year boy, No. 19.
	61	11-year girl, No. 54.		38	7-year girl, No. 19; 11-year boy, No. 5.
	67	10-year boy, No. 103.		41	14-year boy, No. 9; 16-year girl, No. 8.
	70	5-year girl, No. 19.		47	7-year girl, No. 21; 12-year boy, No. 41; 13-year boy, No. 29.
	93	6-year girl, No. 59; 8-year girl, No. 70.		49	12-year boy, No. 46.
	(94)	6-year boy, No. 59.			
	97	10-year boy, No. 110.			

Table of relationship—Continued.

BOYS—Continued.

Age.	No.	Relationship.	Age.	No.	Relationship.
		<i>Brother of—</i>			<i>Brother of—</i>
9-year	52	10-year boy, No. 45; 13-year girl, No. 31.	12-year	(58)	10-year boy, No. 52.
	60	6-year girl, No. 23.		(62)	9-year boy, No. 82.
	82	12-year boy, No. 62.		(79)	6-year girl, No. 35; 8-year boy, No. 59.
	83	13-year boy, No. 68.		(82)	11-year boy, No. 59.
	98	11-year boy, No. 73.		86	10-year girl, No. 50.
	101	5-year girl, No. 29; 9-year boy, No. 103; 12-year girl, No. 105.		95	7-year girl, No. 54; 9-year girl, No. 54.
	(103)	5-year girl, No. 29; 9-year boy, No. 101; 12-year girl, No. 105.		104	9-year girl, No. 71; 14-year girl, No. 80; 16-year girl, No. 17.
	108	14-year boy, No. 73.		(109)	5-year boy, No. 13; 10-year girl, No. 79.
	117	6-year girl, No. 50; 7-year girl, No. 57.		(110)	10-year boy, No. 108.
	118	11-year girl, No. 103.		112	10-year girl, No. 81.
	119	6-year girl, No. 48.		115	14-year girl, No. 65.
	124	11-year girl, No. 90; 14-year boy, No. 91.		(118)	10-year boy, No. 97.
	126	7-year girl, No. 74.		123	14-year girl, No. 67.
10-year	131	14-year boy, No. 24.		126	15-year boy, No. 52.
	1	12-year girl, No. 8.		131	13-year girl, No. 83.
	2	6-year girl, No. 5; 8-year girl, No. 2; 12-year girl, No. 6.	13-year	147	10-year girl, No. 110; 17-year boy, No. 13.
	7	12-year boy, No. 5.		6	11-year girl, No. 8.
	27	8-year girl, No. 18.		(29)	7-year girl, No. 21; 9-year boy, No. 47; 12-year boy, No. 41.
	39	8-year girl, No. 19.		(30)	11-year boy, No. 30.
	(45)	9-year boy, No. 52; 13-year girl, No. 31.		(42)	7-year boy, No. 51.
	52	12-year boy, No. 58.		45	15-year boy, No. 23.
	(65)	8-year boy, No. 60.		47	9-year girl, No. 32; 12-year girl, No. 52.
	73	13-year girl, No. 54.		55	12-year girl, No. 59; 15-year boy, No. 35.
	77	14-year boy, No. 51.		(68)	9-year boy, No. 88.
	83	8-year girl, No. 59.		(78)	5-year boy, No. 11.
	86	13-year girl, No. 68; 14-year girl, No. 61.		(85)	9-year girl, No. 79; 11-year boy, No. 90.
	(95)	5-year boy, No. 15; 10-year girl, No. 58.		(107)	11-year boy, No. 95.
	97	12-year boy, No. 118.		(126)	6-year boy, No. 78; 9-year girl, No. 69.
	(103)	7-year boy, No. 67.	14-year	(9)	9-year boy, No. 41; 16-year girl, No. 8.
	107	13-year girl, No. 79.		(20)	12-year boy, No. 33.
	108	12-year boy, No. 110.		(24)	9-year boy, No. 131.
	(110)	7-year boy, No. 97.		(34)	8-year boy, No. 95.
	(116)	8-year boy, No. 101.		48	12-year girl, No. 65.
	121	14-year girl, No. 82.		(51)	10-year boy, No. 77.
11-year	122	8-year girl, No. 80.		(55)	8-year girl, No. 46; 11-year boy, No. 57.
	5	7-year girl, No. 19; 9-year boy, No. 38.		(58)	11-year boy, No. 68.
	19	5-year girl, No. 4; 9-year boy, No. 26.		65	13-year girl, No. 100.
	30	13-year boy, No. 30.		(73)	9-year boy, No. 108.
	37	9-year girl, No. 24.		(91)	9-year boy, No. 124; 11-year girl, No. 90.
	41	6-year girl, No. 27; 9-year girl, No. 42; 10-year girl, No. 45; 12-year girl, No. 55.	15-year	12	15-year girl, No. 6.
	57	8-year girl, No. 46; 14-year boy, No. 55.		13	10-year girl, No. 10; 16-year boy, No. 6.
	59	12-year boy, No. 82.		(23)	13-year boy, No. 45.
	68	14-year boy, No. 58.		(35)	12-year girl, No. 59; 13-year boy, No. 55.
	(73)	9-year boy, No. 98.		(52)	12-year boy, No. 126.
	88	11-year girl, No. 101.		67	17-year boy, No. 8.
	90	9-year girl, No. 79; 13-year boy, No. 85.	16-year	74	17-year boy, No. 14.
	(91)	6-year boy, No. 60.		(6)	10-year girl, No. 10; 15-year boy, No. 13.
	95	13-year boy, No. 107.		7	12-year girl, No. 27; 14-year girl, No. 12.
12-year	1	8-year girl, No. 5.		8	10-year girl, No. 6; 13-year girl, No. 19.
	(5)	10-year boy, No. 7.		(16)	7-year boy, No. 49.
	25	11-year girl, No. 18.	17-year	(8)	15-year boy, No. 67.
	33	14-year boy, No. 20.		(13)	10-year girl, No. 110; 12-year boy, No. 147.
	(41)	7-year girl, No. 21; 9-year boy, No. 47; 13-year boy, No. 29.		(14)	15-year boy, No. 74.
	(46)	9-year boy, No. 49.	21-year	1	26-year boy, No. 2.
	57	10-year girl, No. 44.	26-year	(2)	21-year boy, No. 1.

Table of relationship—Continued.

GIRLS.

Age.	No.	Relationship.	Age.	No.	Relationship.
		<i>Sister of—</i>			<i>Sister of—</i>
5-year -----	1 (4) (9) 15 (19) (25) (23)	8-year girl, No. 15. 9-year boy, No. 26; 11-year boy, No. 19. 7-year boy, No. 30. 7-year girl, No. 40. 7-year boy, No. 70. 8-year boy, No. 80. 9-year boys, Nos. 101, 103; 12-year girl, No. 105.	9-year -----	(71) (77) (79)	12-year boy, No. 104; 14-year girl, No. 80; 16-year girl, No. 17. 6-year girl, No. 56; 10-year girl, No. 92. 11-year boy, No. 90; 13-year boy, No. 85.
6-year -----	(5) (23) (27) (35) (48) (50) 56 (59) (61) (9) (19) (21) (40) (54) (57) 60 61 65 (74) (2) (5) (15) (18) (19) (46) (57) (59) (70) 77 (80) (83) 7 8 (24) (32) (38) (42) 52 (54) 62 64 (69)	8-year girl, No. 2; 10-year boy, No. 2; 12-year girl, No. 6. 9-year boy, No. 60. 9-year girl, No. 42; 10-year girl, No. 45; 11-year boy, No. 41; 12-year girl, No. 55. 8-year boy, No. 59; 12-year boy, No. 79. 9-year boy, No. 119. 7-year girl, No. 57; 9-year boy, No. 117. 9-year girl, No. 77; 10-year girl, No. 92. 7-year boy, No. 93; 8-year girl, No. 70. 8-year boy, No. 105. 6-year boy, No. 17. 9-year boy, No. 38; 11-year boy, No. 5. 9-year boy, No. 47; 12-year boy, No. 41; 13-year boy, No. 29. 5-year girl, No. 15. 9-year girl, No. 54; 12-year boy, No. 95. 6-year girl, No. 50; 9-year boy, No. 117. 11-year girl, No. 106. 14-year girl, No. 76. 10-year girl, No. 70; 12-year girl, No. 92. 9-year boy, No. 126. 6-year girl, No. 5; 10-year boy, No. 2; 12-year girl, No. 6. 12-year boy, No. 1. 5-year girl, No. 1. 10-year boy, No. 27. 10-year boy, No. 39. 11-year boy, No. 57; 14-year boy, No. 55. 6-year boy, No. 46. 10-year boy, No. 83. 6-year girl, No. 59; 7-year boy, No. 93. 13-year girl, No. 78. 10-year boy, No. 122. 6-year boy, No. 77. 11-year girl, No. 6. 12-year girl, No. 28. 11-year boy, No. 37. 12-year girl, No. 52; 13-year boy, No. 47. 7-year boy, No. 58. 6-year girl, No. 27; 10-year girl, No. 45; 11-year boy, No. 41; 12-year girl, No. 55. 11-year girl, No. 62; 13-year girl, No. 46. 7-year girl, No. 54; 12-year boy, No. 95. 13-year girl, No. 71. 11-year girl, No. 3. 6-year boy, No. 78; 13-year boy, No. 126.	10-year -----	4 (6) 7 8 (10) 37 (43) (44) (45) (50) 54 (70) (79) (81) (92) 94 95 (98) 104 (106) (110) (3) (6) (8) 11 (18) (29) 48 (54) (57) (62) 65 (70) 75 (82) (89) (90) (101) (103) 105 (106) (6) (8) (11) (15) (27) (28) (29)	13-year girl, No. 12. 13-year girl, No. 19; 16-year boy, No. 8. 15-year girl, No. 5. 12-year girl, No. 11; 15-year girl, No. 4. 15-year boy, No. 13; 16-year boy, No. 6. 12-year girl, No. 50. 6-year boy, No. 31; 8-year boy, No. 48. 12-year boy, No. 57. 6-year girl, No. 27; 9-year girl, No. 42; 11-year boy, No. 41; 12-year girl, No. 55. 12-year boy, No. 86. 14-year girl, No. 48. 7-year girl, No. 65; 12-year girl, No. 92. 5-year boy, No. 13; 12-year boy, No. 109. 12-year boy, No. 112. 6-year girl, No. 56; 9-year girl, No. 77. 13-year girl, No. 72. 15-year girls, Nos. 30, 44. 5-year boy, No. 15; 10-year boy, No. 95. 12-year girl, No. 100. 8-year boy, No. 94. 12-year boy, No. 147; 17-year boy, No. 13. 9-year girl, No. 64. 9-year girl, No. 7. 13-year boy, No. 6. 14-year girl, No. 23. 12-year boy, No. 25. 8-year boy, No. 1. 14-year girl, No. 34. 7-year boy, No. 61. 6-year boy, No. 44. 9-year girl, No. 52; 13-year girl, No. 46. 14-year girl, No. 47. 9-year boy, No. 3; 14-year girl, No. 56. 13-year girl, No. 64. 5-year boy, No. 12; 8-year boy, No. 70; 12-year girl, No. 85. 9-year boy, No. 1. 9-year boy, No. 124; 14-year boy, No. 91. 11-year boy, No. 88. 9-year boy, No. 118. 14-year girl, No. 62. 7-year girl, No. 60. 6-year girl, No. 5; 8-year girl, No. 2; 10-year boy, No. 2. 10-year boy, No. 1. 10-year girl, No. 8; 15-year girl, No. 4. 9-year boy, No. 4; 17-year girl, No. 1. 14-year girl, No. 12; 16-year boy, No. 7. 9-year girl, No. 8. 6-year boy, No. 26; 17-year girl, No. 2.

Table of relationship—Continued.

GIRLS—Continued.

Age.	No.	Relationship.	Age.	No.	Relationship.
		<i>Sister of—</i>			<i>Sister of—</i>
12-year	(50)	10-year girl, No. 37.	14-year	(24)	9-year boy, No. 15.
	(52)	9-year girl, No. 32; 13-year boy, No. 47.		(34)	11-year girl, No. 48.
	(55)	6-year girl, No. 27; 9-year girl, No. 42; 10-year girl, No. 45; 11-year boy, No. 41.		(47)	11-year girl, No. 65.
	(59)	13-year boy, No. 55; 15-year boy, No. 55.		(48)	10-year girl, No. 54.
	(65)	14-year boy, No. 48.		(52)	8-year boy, No. 63.
	(85)	5-year boy, No. 12; 8-year boy, No. 70; 11-year girl, No. 82.		(56)	9-year boy, No. 3; 11-year girl, No. 70.
	(92)	7-year girl, No. 65; 10-year girl, No. 70.		(61)	10-year boy, No. 86; 13-year girl, No. 68.
	(100)	10-year girl, No. 104.		(62)	11-year girl, No. 105.
	(102)	15-year girl, No. 29.		(65)	12-year boy, No. 115.
	(103)	5-year boy, No. 18.		(67)	12-year boy, No. 123.
	(105)	5-year girl, No. 23; 9-year boys, Nos. 101, 103.		(76)	7-year girl, No. 61.
13-year	(12)	10-year girl, No. 4.	15-year	(80)	9-year girl, No. 71; 12-year boy, No. 104; 16-year girl, No. 17.
	(19)	10-year girl, No. 6; 16-year boy, No. 8.		(82)	10-year boy, No. 121.
	(31)	9-year boy, No. 52; 10-year boy, No. 45.		(4)	10-year girl, No. 8; 12-year girl, No. 11.
	40	15-year girl, No. 20.		(5)	10-year girl, No. 7.
	(46)	9-year girl, No. 52; 11-year girl, No. 62.		(6)	15-year boy, No. 12.
	(54)	10-year boy, No. 73.		(20)	13-year girl, No. 40.
	(64)	11-year girl, No. 75.		(29)	12-year girl, No. 102.
	(68)	10-year boy, No. 86; 14-year girl, No. 61.		(30)	10-year girl, No. 95; 15-year girl, No. 44.
	(71)	9-year girl, No. 62.	16-year	(44)	10-year girl, No. 95; 15-year girl, No. 30.
	(72)	10-year girl, No. 94.		6	18-year girl, No. 6.
	(78)	8-year girl, No. 77.		(8)	9-year boy, No. 41; 14-year boy, No. 9.
	(79)	10-year boy, No. 107.		(17)	9-year girl, No. 71; 12-year boy, No. 104; 14-year girl, No. 80.
	(83)	12-year boy, No. 131.	17-year	(1)	9-year boy, No. 4; 12-year girl, No. 15.
	(100)	14-year boy, No. 65.		(2)	6-year boy, No. 26; 12-year girl, No. 29.
14-year	(3)	8-year boy, No. 18.	18-year	(6)	16-year girl, No. 6.
	(9)	8-year boy, No. 17.			<i>Mother of—</i>
	(12)	12-year boy, No. 27; 16-year boy, No. 7.	29-year	1	3-year boy.
	(23)	11-year girl, No. 11.			

List of Observers.

BOYS.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Poas.</i>		<i>Bolton—</i> <i>Con't'd.</i>		<i>Chamberlain.</i>	
5.....	1-3, 6, 19, 37, 38.	7.....	39, 40, 51-53, 64, 65, 83, 88, 92-94.	5.....	5, 7, 8, 24-28.
6.....	1-23, 66, 67.	8.....	34-37, 39, 56-59, 79-86.	6.....	24-28, 32-38, 52, 90-94.
7.....	1-4, 7-38, 41, 98, 105-108.	9.....	50-57, 79-86, 113-118.	7.....	42-50, 61-63, 82, 117-122.
8.....	1-9, 15-33, 40-42, 94, 108.	10.....	50, 73-76, 105, 106.	8.....	10-14, 43-47, 78, 109, 110.
9.....	2-34, 36-46, 48, 49, 123-125, 131.	11.....	40, 60, 61, 101, 102.	9.....	62, 68-70, 106-112.
10.....	1-38, 40-44, 113-119.	12.....	97-101, 119, 146.	10.....	56, 57, 59, 100-104.
11.....	1-30, 62-65, 111, 112.	13.....	84-88, 116.	11.....	49, 50, 85-88, 96-100.
12.....	1-44, 46, 79, 87-92, 130, 141, 142, 146, 175.	14.....	65-68.	12.....	66-74, 77, 109-111, 146.
13.....	4-28, 36-43, 70-77, 116.	15.....	32, 66.	13.....	63, 64, 99-106, 116, 168.
14.....	3-26, 60, 61.	18.....	15.	14.....	50-53, 79-82, 85.
15.....	4-17, 19-25, 46-48, 66.			15.....	64-66, 69-73, 75, 76.
16.....	6-12, 18, 19, 37, 40.	<i>Brown.</i>		16.....	35, 36, 38, 39.
18.....	15.	7.....	145.	17.....	13.
		9.....	150-154.	18.....	8, 15.
<i>Bolton.</i>		10.....	134-137.		
5.....	13, 14.	11.....	123-126.	<i>Dorsey.</i>	
6.....	29, 30, 39, 56-58, 60-62.	12.....	159, 160.	13.....	29-35.
		15.....	149.	14.....	27-31.
				15.....	18, 26-29.
				16.....	13-16.

List of Observers—Continued.

BOYS—Continued.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Hodgkins.</i>		<i>Saville.</i>		<i>West—Cont'd.</i>	
11.....	140.	11.....	80-83.	7.....	66-81, 84-87, 89-91, 95,
12.....	169.	12.....	102-107.		96, 109-116, 123, 134-
13.....	165, 166.	13.....	89-91.		144, 146, 149-153.
15.....	152.			8.....	38, 48-50, 53, 60-77, 87-
<i>Reigert.</i>		<i>Stillings.</i>			93, 111, 115-118, 120,
		7.....	97.		121, 125, 127, 130, 134-
5.....	4.	9.....	121, 122.		137.
6.....	31.	10.....	107-112.	9.....	47, 58-61, 71-78, 87-105,
7.....	54-60.	11.....	103-110.		119, 132, 133, 143-145,
8.....	51, 52.	12.....	131-140.		161-182.
9.....	63-67.	13.....	118-125.	10.....	45-49, 51-54, 60-72, 77-
10.....	55.	14.....	92.		99, 151, 154-171.
11.....	44-48.	15.....	53.	11.....	31-39, 41-43, 51-59, 66-
12.....	62-64.				79, 84, 89-95, 139, 147-
13.....	53-60.	<i>West</i>			172.
14.....	34-49, 55.	<i>and</i>		12.....	45, 47-61, 65, 78, 80-86,
15.....	33-44.	<i>Cham-</i>			93-96, 108, 112-118,
16.....	17.	<i>berlain.</i>			158, 167, 168, 170-172,
17.....	4.	7.....	5, 6.	13.....	176-202.
18.....	7.	9.....	35.		44-52, 61, 62, 66-69, 78-
<i>Riddle.</i>		10.....	39, 58.		83, 92-98, 107-109,
12.....	120-126.	12.....	75, 76.		127-133, 154, 155, 161-
13.....	111-115, 117.	13.....	65.	14.....	164, 167, 170, 173-175.
14.....	87-91.	14.....	54.		32, 33, 56-59, 62, 64, 69-
15.....	49-52.	<i>West.</i>			78, 83, 84, 86, 94-125,
16.....	26.	5.....	9-12, 15-18, 20-23, 29-	15.....	146-150, 153-156, 158,
<i>Ruoff.</i>		6.....	35.		162, 164, 165, 168, 169.
14.....	157.			16.....	30, 31, 45, 54-63, 74, 77-
15.....	153.				143, 148, 157-159.
				17.....	20-25, 42-91, 94-98.
				18.....	5, 6, 16-47.
					23-59.

List of Schools.

BOYS.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Woodland Street.</i>		<i>Miss Lewiston's.</i>		<i>Worcester Academy.</i>	
5.....	1-3, 37, 38.	5.....	34, 35.	9.....	1.
6.....	1-23.	6.....	105.	12.....	146-148.
7.....	1-38.	7.....	144.	13.....	116.
8.....	1-31.			14.....	93.
9.....	2-44.	<i>Freeland Street.</i>		15.....	66-76.
10.....	1-40.	5.....	5, 6.	16.....	27-41.
11.....	1-27.	6.....	24-30.	17.....	7-15.
12.....	1-36.	7.....	39-53.	18.....	8-22.
13.....	4-28.	8.....	32-47.	<i>Webster Square.</i>	
14.....	3-22.	9.....	45-57, 59, 62.	5.....	4, 7, 8.
15.....	4-17.	10.....	41-50.	6.....	31-38.
16.....	6-11.	11.....	28-37, 40.	7.....	54-63.
<i>Sycamore Street.</i>		12.....	37-54.	8.....	48-52.
5.....	11, 12.	13.....	29-51.	9.....	58, 60, 61, 63-70.
6.....	51.	14.....	23-33.	10.....	51-55.
7.....	76-81.	15.....	18-32.	11.....	38, 39, 41-46.
8.....	67-76.	16.....	12-16.	12.....	55-61.
9.....	90-100, 167.	<i>High school.</i>		13.....	52.
10.....	78-92.	13.....	127-133.	<i>H. M. A.</i>	
11.....	62-79.	14.....	94-110, 112-125.	13.....	1-3.
12.....	86-96.	15.....	77-142.	14.....	1, 2.
13.....	70-81.	16.....	42-75, 77-89.	15.....	1-3.
14.....	58-63.	17.....	16-47.	16.....	1-5.
15.....	45-48.	18.....	23-48.	17.....	1-3.
16.....	18, 19.			18.....	1-6.

List of Schools—Continued.

BOYS—Continued.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Clark University.</i>		<i>Winslow Street.</i>		<i>Chandler Street—Cont'd.</i>	
15-----	154.	5-----	13-18.	17-----	4.
<i>Downing Street.</i>		6-----	52-64, 112.	18-----	7.
5-----	33.	7-----	82-96.	<i>Oxford Street.</i>	
8-----	122, 125, 129, 131.	8-----	77-93, 120, 121.	5-----	19-21.
9-----	169, 170, 187.	9-----	101-119, 162, 166.	6-----	65-83.
10-----	160, 163, 166, 169, 171.	10-----	93-106, 149-153.	7-----	97-109.
11-----	151, 154.	11-----	80-102, 141-148.	8-----	94-108.
12-----	176, 177, 200, 202.	12-----	97-119, 172-174.	9-----	120-130.
<i>Die Street.</i>		13-----	82-110, 168.	10-----	107-123.
5-----	29-33.	14-----	64-86, 111, 152, 157, 161, 169.	11-----	103-114.
6-----	97-104.	15-----	54-65, 153.	12-----	120-145.
7-----	124-143.	16-----	20-25, 94-96.	13-----	111-115, 117-126.
8-----	112-118.	17-----	5, 6.	14-----	87-92.
9-----	134-147.	<i>Chandler Street.</i>		15-----	49-53.
10-----	124-131.	5-----	9, 10.	16-----	26.
11-----	115-121.	6-----	39-50.	<i>Belmont Street.</i>	
12-----	149-158.	7-----	64-75.	5-----	22-28.
13-----	134-155.	8-----	53-66.	6-----	84-96.
14-----	126-144.	9-----	71-89, 161.	7-----	110-123, 145.
15-----	143-148.	10-----	56-77.	8-----	109-111, 119.
16-----	90-93.	11-----	47-61.	9-----	132, 133, 148-160.
17-----	48, 49.	12-----	62-85.	10-----	132-148.
18-----	49.	13-----	53-69.	11-----	122-140.
		14-----	34-57.	12-----	159-171.
		15-----	33-44.	13-----	156-167.
		16-----	17.	14-----	145-151.
				15-----	149-152.

List of Observers.

GIRLS.

Year.	Number.	Year.	Number.	Year.	Number.
<i>Boas.</i>		<i>Chamberlain.</i>		<i>Reigart.</i>	
5-----	1-9.	5-----	38.	5-----	13-15.
6-----	1-11, 60.	6-----	44, 73-77.	6-----	22, 24-28.
7-----	1-19, 71-77.	7-----	28-30, 56, 84-86.	7-----	34-36, 38-40.
8-----	1-21, 27-30, 53, 76-82.	8-----	31-32, 38-39, 40, 61-65, 84.	8-----	36-37.
9-----	1-29, 33-34.	9-----	74-82, 89.	9-----	41-43.
10-----	31, 99-113.	10-----	88-90.	12-----	58-60.
11-----	5-33, 41-42, 70.	11-----	95-97, 112-115.	13-----	41-49.
12-----	5-38, 40-42, 47-49, 74-77.	12-----	101-102, 106-107.	14-----	44-50.
13-----	6-25, 56-59, 61-65.	13-----	97-99.	15-----	21-25.
14-----	1-26, 29-30, 37, 55-59.	14-----	73-80.	16-----	15-16.
15-----	1-16, 42.	15-----	43-46.	17-----	4.
16-----	1-11.	16-----	—.	<i>Riddle.</i>	
<i>Bolton.</i>		17-----	—.	10-----	70.
5-----	10-12, 25-27.	18-----	13.	11-----	89.
6-----	12-21, 45, 49, 55.	<i>Dorsey.</i>		12-----	89, 93-94.
7-----	20-22, 31-33, 41, 45.	12-----	39.	13-----	76, 83-87.
8-----	23-26, 33-34, 42-46, 66-68, 72-74.	14-----	27-28.	15-----	40-41.
9-----	32, 51-53, 83-86, 88.	<i>Gerro-dette.</i>		16-----	22.
10-----	91-95.	12-----	90.	17-----	5.
11-----	116-118.	14-----	72.	<i>Ruoff.</i>	
12-----	50, 54.	<i>Hodgkins.</i>		12-----	165.
13-----	36.	12-----	156-158.	13-----	140.
14-----	36, 38-40, 69.	13-----	137, 139.	14-----	115.
<i>Brown.</i>		<i>Lee.</i>		<i>Saville.</i>	
9-----	103-107.	17-----	6-10.	12-----	87.
10-----	39, 134-136.	18-----	1-12.	13-----	73-75.
11-----	132-134.			14-----	70.
12-----	—.				
13-----	26, 127.				

List of Observers—Continued.

GIRLS—Continued.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Stillings.</i>		<i>West.—</i> <i>Cont'd.</i>		<i>West.—</i> <i>Cont'd.</i>	
8.....	75.	8.....	22, 75, 41, 47-52, 54-60,	13.....	27-35, 37-40, 50-55, 60,
9.....	63.		69-71, 83, 85-114.		66-72, 77-82, 95-96,
10.....	2, 71-76.	9.....	30-31, 35-40, 44-50,		100-101, 103-126, 128-
11.....	1-4, 90-93, 98-101.		54-62, 64-73, 87, 90-	14.....	138, 141-143.
12.....	1-4, 95-99, 108.		102, 108-119.		31-36, 41-43, 51-54, 60-
13.....	1-5, 88-93, 102.	10.....	1, 32-38, 40-69, 77-87,		68, 71, 81, 89-114,
14.....	82-88.		96-99, 114-133, 137-	15.....	116-118.
<i>West.</i>			162.	16.....	17-19, 26-39, 47-112.
5.....	16-24, 28-37, 39-41.	11.....	34-40, 43-63, 71-88, 94,	17.....	12-14, 17-21, 23-91.
6.....	23, 29-43, 46-48, 50-54,		96, 102-111, 119-131,	18.....	3, 19-69.
	56-59, 61-72, 78-86.	12.....	135-155.		30-49.
7.....	23-27, 37, 42-44, 46-55,		43-46, 51-53, 55-57,		
	57-70, 78-83, 87-104.		61-73, 78-86, 88, 91-		
			92, 103-105, 109-155,		
			159-164, 167-169.		

List of Schools.

GIRLS.

Year.	Numbers.	Year.	Numbers.	Year.	Numbers.
<i>Wood-</i> <i>land</i> <i>Street.</i>		<i>Freeland</i> <i>Street—</i> <i>Cont'd.</i>		<i>Salem</i> <i>Street.</i>	
5.....	1-9.	9.....	30-34.	7.....	103.
6.....	1-10.	10.....	30-31, 33-39.		
7.....	1-19.	11.....	34-47.	<i>Dix</i> <i>Street.</i>	
8.....	1-22.	12.....	38-54.	5.....	39.
9.....	1-24.	13.....	24-36, 107.	6.....	78-82.
10.....	3-29.	14.....	26-40.	7.....	87-99.
11.....	5-33, 153.	15.....	13-18.	8.....	85-96.
12.....	5-37, 169.			9.....	91-101.
13.....	6-23, 96.	<i>High</i> <i>School.</i>		10.....	115-133.
14.....	1-25, 118.	13.....	109.	11.....	119-129.
15.....	1-12.	14.....	88-96, 100.	12.....	115-135.
16.....	1-11, 83.	15.....	48-97, 99.	13.....	111-123.
17.....	1-2.	16.....	27-73, 75-79, 81-82, 84-	14.....	101-109.
<i>Sycamore</i> <i>Street.</i>			85.	15.....	100-106.
5.....	20-23.	17.....	19-69.	16.....	86-90.
6.....	42-43.	18.....	30-48.	<i>Winslow</i> <i>Street.</i>	
7.....	49-55.	<i>Webster</i> <i>Square.</i>		5.....	24-30.
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CHAPTER III.

REGULATIONS RELATING TO PENSIONS AND INSURANCE IN ALL GERMAN UNIVERSITIES.

COLLECTED BY PROF. JULIUS HATSCHECK, OF HEIDELBERG, FOR DR. THEODORE MARBURG, TRUSTEE OF JOHNS HOPKINS UNIVERSITY, OF BALTIMORE, MD., AND BY THE LATTER PRESENTED TO THE UNITED STATES COMMISSIONER OF EDUCATION.

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I. THE UNIVERSITIES OF PRUSSIA.

A.—PROVISION FOR THE WIDOWS AND ORPHANS OF PROFESSORS.

1. ROYAL FREDERICK-WILLIAM UNIVERSITY OF BERLIN.

In the year 1816 a number of professors of the University of Berlin had organized in order to establish a special institution making provision for the widows and orphans of professors.

After approval of this purpose by the royal decree of March 6, 1816, statutes were drawn up on September 11, 1816, and approved by the royal ministry of the interior. In the year 1847, because of a number of changes in these statutes, a revision of them was made, to which an appendix was added in the year 1848. Essential changes of the statutes resulted from the adoption of the resolutions in the general meeting of July 10, 1876, and their approval by the royal ministry of religious, educational, and medical affairs under date of August 27, 1877, and a new revision became necessary, which, however—irrespective of the reckoning in marks which had been introduced in the meanwhile—was limited to the entry of these changes.

The law of May 20, 1882, concerning survivors deprived the judge and the secretary of the university of the right of membership in the institution. This necessitated further modification of the respective paragraphs and a further revision of the statutes, which resulted, on March 15, 1884, in the Revised Statutes of the Professors' Widows' Pensioning Institute (Revidirte Statuten der Professoren-Wittwen-Versorgungsanstalt), approved in a ministerial decree on July 8, 1884.

By these revised statutes all ordinary and extraordinary professors of the university were obliged to become members of the institution. If they had joined before December 10, 1877, they had to pay annual premiums of 96, 108, and 120 marks, respectively; and if they joined after said date they were to pay annual premiums of 120, 144, and 192 marks, respectively. The annual pension of widows was 1,200 marks. Orphans were granted annual assistance as follows: One half orphan, 300 marks; two half orphans, 500 marks; three half orphans, 600 marks; one orphan deprived of both parents, 600 marks; two such orphans 1,000 marks, and three such orphans 1,200 marks.

In the year 1889 state provision for the *relicts*^a of teachers in Prussian universities was regulated anew. Accordingly the following statutes were adopted in the special general meeting of July 24, 1889, and approved by the minister of religious, educational, and medical affairs under date of July 26, 1889:

^a In this compilation the term "*relicts*" is understood to include widows and children, and in some cases other near dependent relatives.

Statutes of the Professors' Widows and Orphans' Pension Institute of the Royal Frederick-William University of Berlin.

I. MEMBERSHIP.

§1. The rules and regulations in force for membership in the Widows' Pensioning Institute, established since January 1, 1816, for the professors of the University of Berlin, are as follows:

1. All professors (including the emeritus professors) that occupy a professor's chair with salary from the exchequer of the university are officially members of the institution and remain such during the continuance of said occupancy.
2. Professors who do not occupy a chair salaried from the exchequer of the university, but who were members at the time of the adoption of these statutes, retain their rights as members during the continuance of their connection with the university.
3. No other persons except those designated under section 1 can become members of the institution.

II. ALLOWANCES OF THE RELICTS OF MEMBERS.

§2. The widow and the surviving legitimate children, or children legitimized after marriage, of members who may have secured membership after the adoption of these statutes shall be paid widows and orphans' claims in accordance with the regulations of §§ 3 to 8.

§3. The amounts paid to widows shall be as follows:

	Marks.
For the widow of an ordinary professor.....	1,400
For the widow of an extraordinary professor	1,000

The amounts paid to orphans shall be as follows:

For an orphan who has lost both parents (<i>Ganzwaise</i>).....	600
For each additional such orphan	400
For a half orphan.....	400
For each additional half orphan.....	250

§4. If the widow was more than fifteen years the junior of the deceased the widow's claim shall be reduced 5 per cent for each year of the difference in age over fifteen until and including the twenty-fifth year.

§5. The widow shall have no claim upon pension if her marriage with the deceased was concluded within three months of his death and if the minister of religious, etc., affairs, on the ground of proved facts, shall have found that the marriage had been concluded only for the purpose of procuring for the widow the pension claim.

§6. Payment of the widows and orphans' claims shall begin on the expiration of the period of grace and shall be made monthly.

§7. The right to claim the widows and orphans' pension expires—

1. For each claimant with the end of the month in which he or she is married or dies.
2. For each orphan, besides, with the end of the month in which he or she completes the twenty-first year of life.

§8. The right to claim the widows and orphans' pension shall be suspended—

1. When the claimant loses or forfeits German citizenship, until it shall be restored.
2. When, and as long as the claimant is entitled to a widows and orphans' pension on the basis of the imperial law of April 20, 1881 (R. G. B. I, p. 85), or of the Prussian law of May 20, 1882 (G. S., p. 298), to the amount of this widows and orphans' pension.

III. DISCONTINUANCE OF FEES.

§9. Members that shall obtain membership after the adoption of these statutes shall not pay any fees.

IV. TRANSITION REGULATIONS.

§10. The regulations of §§ 2, 3, and 5 to 8, subparagraph 1, shall apply also to the relicts of those who may be members at the time of the adoption of these

statutes, if these members in a written declaration, to be handed to the executive committee of the institute on or before December 1, 1889, renounce for their prospective relicts all claims that might accrue to them in accordance with the statutes of March 15 and August 30, 1884, heretofore in force. Otherwise the regulations of the statutes heretofore in force shall apply to these relicts.

§11. The payment of fees on the part of those who were members at the time when these statutes took effect is hereby discontinued.

The regulation of clause 1 shall not apply to members whose possible future relicts may have claims upon widows and orphans' pension in accordance with the imperial law of April 20, 1881 (R. G. B. 1, p. 85), or of the Prussian law of May 20, 1882 (G. S., p. 298).

§12. The claims of the relicts of members deceased before the adoption of these statutes shall be adjudged according to the statutes heretofore in force.

V. RIGHTS OF THE INSTITUTION.

§13. The institution shall have the rights of a corporation. Particularly, it shall be competent to receive gifts from living persons and by legacy in accordance with statutory requirements.

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession shall remain under its control.

The income from its property, in so far as the donors of gifts and legacies have not made other dispositions, shall be applied exclusively in defraying the statutory expenses of the institution.

Allowances assigned to the institution by the State in accordance with provisions for securing the solvency of university institutions for the pensioning of widows and orphans shall be added to the income of the institution from its property.

§15. The capital of the institution shall be invested, with the consent of the minister of religious, etc., affairs, on security or mortgages, or eventually, in so far as this can not be done safely, in the purchase of interest-bearing bonds, in which the money of wards can be legally invested.

VII. ADMINISTRATION OF THE INSTITUTE.

§16. The administration of the institute is directed by an executive committee, consisting of the rector and two directors, in accordance with further detailed rules to be fixed by the minister of religious, etc., affairs and the minister of finance, and with instructions of the minister of religious, etc., affairs.

In judiciary matters the executive committee shall procure the advice of the judge of the university.

§17. The care of the funds and the conduct of financial affairs lies with the treasury of the university, under the direction and supervision of the executive committee.

An annual report shall be submitted by the treasurer of the university within six weeks after the close of the year.

§18. This annual report shall be received by two auditors, under the direction of the rector and in connection with the two directors, and then forwarded, with the report of the executive committee, to the minister of religious, etc., affairs for inspection and ultimate discharge.

§19. In case of the death of a director or temporary inability to attend to his duties on the part of such director, one of the auditors shall in his place attend to the duties of the director until a new director shall have been elected or the temporary inability removed.

§20. The two directors and the two auditors shall be elected for one year by absolute majority of those present at the regular annual meeting of all the members.

The elected officers shall serve without compensation. Should anyone who has served in one of these offices for one year be elected, he may refuse acceptance whenever there are other members who have not served in that respective office.

VIII. MEETINGS.

§21. A regular meeting of all the members shall be called annually by the executive committee.

At this meeting the executive committee shall submit the report concerning the administration of the past year.

Then the meeting shall elect the two directors and the two auditors.

§22. Special meetings of all members shall be called by the rector—

1. On motion of the executive committee.

2. On motion of ten members.

In these motions and in the call the subject of deliberation shall be announced.

Special meetings shall not be called during the Easter and fall vacations.

§23. Special meetings shall be competent to pass resolutions if more than half of all the members are present.

If a called meeting fails of a quorum a second meeting shall be called, and this second meeting shall be competent to pass resolutions without reference to the number present.

In these called meetings resolutions shall be adopted by the absolute majority of the members present.

IX. AMENDMENTS OF STATUTES.

§24. Amendments of statutes can be made only at special meetings. The passage of such amendments shall require three-fourths of the votes of those present. Adopted amendments shall require the approval of the minister of religious, etc., affairs.

X. CONCLUSION.

§25. These statutes shall take effect on the 1st of April, 1889.

On this day the revised statutes of March 15 (August 30), 1884, cease to have effect, in so far as they are not kept in force by sections 10 to 12.

Closely connected with the Professors' Widows and Orphans' Pension Institute is the *Fischer-Hayne Institute* for the benefit of needy daughters of deceased professors of the University of Berlin.

Prof. Dr. Frederick Gottlob Hayne and his wife, Mary Elizabeth, née Fischer, of Berlin, ordered in their conjoint will of the 8th of August, 1831, that their property left after their decease be applied to the establishment of an institution from whose revenue needy daughters of deceased professors of the Berlin University, both ordinary and extraordinary, should receive during their lifetime as long as they may remain unmarried an annual stipend of 100 thalers, the more needy to have precedence of the less needy.

This institution received governmental approval in a ministerial decree of February 27, 1833. Under the date of October 10, 1878, the authorized ministry decreed for the conduct of the institution, on the basis of the will, the following:

Statutes of the Fischer-Hayne Institute.

§1. The institution shall be known as the Fischer-Hayne Institute.

§2. It shall be connected with the Professors' Widows and Orphans' Pension Institute of the Berlin University, and administered by the latter under the following stipulations applying to it:

§3. The institute shall be considered as a responsible, judicial person. The papers and books concerning its property and administration are to be kept separately.

§4. The object of the institute is to assist needy unmarried daughters of deceased ordinary and extraordinary professors of the University of Berlin.

For this purpose annual stipends of 300 marks shall be paid during the life of the stipendiary from the revenues of the property of the institute.

§5. Stipends shall be granted only to legitimate daughters of professors, and to these only:

1. If they are unmarried, and

2. If they are of irreproachable character.

§6. Among several claimants entitled to annual stipends the greater need shall decide. In cases of equal need the services of the father to science and to the University of Berlin shall be specially considered.

§7. Assignments of stipends shall be made by the academic senate on motion of the directors of the Professors' Widows and Orphans' Pension Institute. Voting shall be by ballot, and the absolute majority of votes shall decide. In case of a tie vote the rector shall decide.

If a motion is not approved by the senate the matter shall be referred to the directors.

§8. Payment of the annual stipends shall be made quarterly in advance and in full for the quarter in which it shall have been assigned.

§9. The annual stipends shall be paid even when the stipendiaries live outside of the Prussian State.

§10. Should the stipendiary die her heirs shall have no claim on the remaining quarterly payments of the year of decease.

§11. The annual stipend shall cease—

1. If the stipendiary is married.

2. If she should become unworthy of the stipend.

Cessation of the stipend in such cases shall be ordered by the academic senate on motion of the report of the directors, and shall require approval of the authorized royal ministry.

Finally, since 1890 there exists in connection with the Royal Frederick-William University of Berlin a *relief fund*, with the object of furnishing assistance to the relicts of all teachers and officials of the university, as well as to the officials of the treasury of the university, in case of need.

The statutes of this relief fund and the decree of the 10th of March, 1890, expressing approval of the same by the minister of religious, etc., affairs and the minister of the interior are as follows:

I. OBJECT OF THE RELIEF FUND.

§1. The "relief fund" established in connection with the Royal Frederick-William University has for its object the furnishing of assistance to the relicts, to the instructors (professors, private instructors, and teachers), and officials of the university and of the treasurer of the university in case of need.

Among the relicts are included—

1. Widows.

2. Sons and daughters.

3. Other near relatives that were included in the immediate family of the deceased and that have lost in him their provider.

§2. The granting of assistance is not confined to the relicts of members of the relief fund, yet in case of equal need these shall have precedence over the relicts of nonmembers.

II. MEMBERSHIP.

§3. All professors, private instructors, and teachers of the university are entitled to membership of the relief fund.

§4. Membership is acquired—

1. By the pledge to pay an annual fee of at least 5 marks, to be paid quarterly in advance.

2. By the payment of a single fee of at least 100 marks for the establishment of an endowment fund.

§5. Membership ceases—

1. Upon written notice of voluntary withdrawal at any time.

2. Upon separation from the university in any other way than by retirement as emeritus.

3. Upon nonpayment of the fees after a third request by the executive committee.

III. PRIVILEGES OF THE INSTITUTION.

§6. The "relief fund" shall have the privileges of a corporation.

Particularly it is competent to acquire gifts from living persons and by legacy in accordance with legal regulations.

IV. THE GRANTING OF ASSISTANCE.

§7. Assistance shall be granted by the executive committee (sec. 10) in accordance with the provisions of sections 1 and 2.

Every member shall have the right to request grants of assistance.

§8. Assistance shall be assigned—

1. From the interest of the endowment provided by the founders of the fund.
2. From the interest of other endowments obtained by the fund.
3. From the annual fees of members (sec. 4).
4. From contributions made expressly for this purpose.

§9. Assistance may be granted in single payments or in periodic payments for one or more, at most three, years (not excluding the admissibility of repeated grants).

Not more than one-half of the income indicated in section 8 shall be used annually for periodic grants.

Periodic grants shall cease before lapse of the time for which they were granted as soon as the grantees cease to need them.

V. ADMINISTRATION OF THE FUND.

§10. The relief fund shall be administered by the executive committee of the Professors' Widows and Orphans' Pension Institute whether or not the members of this committee are members of the relief fund.

§11. The provisions of the statutes of July 26, 1889, of the institute, designated in §10 and added as appendix to these statutes, shall apply to the administration of any relief fund, under approval of the minister of religious, educational, and medical affairs.

VI. GENERAL MEETINGS.

§12. The general assembly consists of all the members of the fund. The executive committee (§10) shall preside in the assembly.

§13. For general meetings the provisions of §§ 21 to 23 of the statutes of July 26, 1889, indicated in §11, shall apply.

VII. AMENDMENTS OF STATUTES.

§14. The statutes can be amended only by called general meetings. The adoption of resolutions shall require a majority of three-fourths of the members present. Adopted amendments require the approval of the minister of religious, etc., affairs.

The above statutes of the "relief fund" of the Royal Frederick William University, of Berlin, are hereby approved on the basis of the ministerial decree of September 29, 1833 (G. S., p. 121), with the proviso that—

1. At least 10 per cent of the income of the "relief fund" be applied to the increase of its endowment fund.
2. That amendments of the statutes shall require, in addition to the approval of the minister of religious, etc., affairs, also that of the minister of the interior.

Berlin, March 10, 1890.

[L. S.]

Minister of religious, educational, and medical affairs.

VON GOSSLER.

Minister of the Interior, per—

LODEMAN.

2. THE ROYAL RHENISH FREDERICK-WILLIAM UNIVERSITY OF BONN.

By the approval of the statutes, on March 28, 1822, an institution for the care of widows and orphans was inaugurated for the University of Bonn. According to these statutes, and the additions made to them under the dates of April 24, 1831, and June 20, 1855, all ordinary and extraordinary professors, as well as the librarians and the prosector of the university of equal rank with the extraordinary professors, are ex officio members of said institution, while the university instructors that occupied professorships only as secondary office and the nonsalaried extraordinaries are excluded from membership.

The annual membership fee was 96 marks; the annual pension of the widow of a member was 1,080 marks, while the surviving orphans (having lost one or both parents) received annual stipends of 270 to 1,080 marks.

Since April 1, 1889, the following statutes, approved by the minister of religious, educational, and medical affairs, under date of December 2, 1889, have been in force.

Statutes of the Professors' Widows and Orphans' Pension Institute of the Royal Rhenish Frederick-William University of Bonn.

I. MEMBERSHIP.

§1. Membership of the Professors' Widows and Orphans' Pension Institute at the University of Bonn shall be subject to the following provisions:

1. All professors (including emeritus professors) that occupy a professorship with salary from the exchequer of the university are ex officio members of the institution and shall continue as such during the continuance of said occupancy.

2. Professors who do not occupy a professorship salaried from the exchequer of the university, but who were members at the time of the adoption of these statutes, retain their rights as members during the continuance of their connection with the university.

3. Persons not designated under section 1 can not become members of the institution.

II. ALLOWANCES OF THE RELICTS OF MEMBERS.

§§2 to 8. The same as on page 135.

III. DISCONTINUANCE OF FEES.

§9. Members that have obtained membership after the adoption of these statutes shall not pay entrance or other fees, nor, respectively, give drafts for the former.

IV. TRANSITION REGULATIONS.

§10. The regulations of §§ 2, 3, and 5 to 8, clause 1, apply also to the relicts of those who may be members at the time of the adoption of these statutes if these members, in a written declaration to be handed to the executive committee of the institution on or before January 1, 1890, renounce for their prospective relicts all claims that might accrue to them in accordance with the statutes heretofore in force; provided, however, that the director of the library and judge of the university shall hold rank with ordinary professors and the professor and the questor with extraordinary professors.

Otherwise the provisions of the statutes heretofore in force shall apply to the relicts of these members.

§11. The obligation to pay fees on the part of those who were members at the time when these statutes took effect shall cease; the entrance fees, respectively the drafts for the same, shall be returned.

The regulations of clause 1 shall not apply to members whose possible future relicts may have claims upon widows and orphans' pensions under the imperial law of April 20, 1881 (Rg.-Bl., p. 85), or of the Prussian law of May 20, 1882. (GS., p. 298.)

§12. As above, page 136.

V. PRIVILEGES OF THE INSTITUTION.

§13. As above, page 136.

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession shall remain under its control, as well as the statutory annual contribution of 1,500 marks by the state.

The income from its property, in so far as the donors of gifts and legacies have not made other dispositions, shall be applied exclusively in defraying the statutory expenses of the institution.

Allowances assigned to the institution by the state, in accordance with provisions for securing the solvency of university institutions for the pensioning of widows and orphans, shall be added to the income of the institution from its property.

§15. The capital of the institution shall be invested, with the approval of the curator of the university, on security or mortgages, or eventually, in so far as this can not be done safely, in the purchase of interest-bearing bonds in which the money of wards can be legally invested.

VII. ADMINISTRATION OF THE INSTITUTION.

§§16 and 17. As above.

§18. The annual report shall be received by two auditors, under direction of the rector and the two directors, and then forwarded, with the report of the executive committee, to the curator of the university for inspection and ultimate discharge.

§§19 and 20. As above, page 136.

VIII. MEETINGS.

§§21 to 23. As above, page 137.

IX. AMENDMENTS OF STATUTES.

§24. As above, page 137.

X. CONCLUSION.

§25. These statutes shall take effect on the 1st of April, 1889.

On this day the statutes of March 28, 1882, together with all subsequent amendatory provisions of the same, shall cease to have effect, in so far as they are not kept in force by §§10 to 12.

3. THE ROYAL UNIVERSITY OF Breslau.

By the Government decree of March 28, 1822, a separate institution for the care of widows and orphans was established for the University of Breslau.

All ordinary and extraordinary professors became ex officio members of the institution. There were excluded, however, the Catholic clergy, the instructors that occupied professorships as secondary offices and nonsalaried extraordina-
naries.

The annual membership fee was 72 marks, for which widows received an annual pension of 1,200 marks and surviving orphans (full and half orphans) annual stipends of 300 to 1,100 marks.

Since April 1, 1889, the following statutes, approved by the minister of religious, educational, and medical affairs, under date of September 19, 1889, have been in force:

Statutes of the Professors' Widows and Orphans' Pension Institute of the Royal University of Breslau.

I. MEMBERSHIP.

§1. Membership of the Professors' Widows and Orphans' Pension Institute established for the professors of the University of Breslau since January 1, 1822, shall be under the following provisions:

Nos. 1 to 3, as above, page 135.

II. ALLOWANCES OF THE RELICTS OF MEMBERS.

§§2 to 8. As above, page 135.

III. DISCONTINUANCE OF FEES.

§9. As above, page 135.

IV. TRANSITION REGULATIONS.

§10. As given above, except the date of limitation, which is changed to December 1, 1889, and the proviso of the first section, which reads: "*Provided, however, That the questor and the secretary of the university shall hold rank with the extraordinary professors.*"

§11. The obligation to pay fees on the part of those who were members when these statutes took effect shall cease; the entrance fees paid in accordance with §§ 5 and 6 of the statutes of March 28, 1822, respectively, the drafts issued therefor shall be returned.

The remainder of this paragraph as above.

§12. As above, page 136.

V. PRIVILEGES OF THE INSTITUTION.

§13. As above, page 136.

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession, as well as the statutory annual contribution of 3,000 marks by the State, shall remain under its control. The income from such property shall be applied exclusively for the statutory expenses of the institution, in so far as the donors of gifts and legacies have not made other dispositions.

Allowances assigned to the institution by the State, in accordance with provisions for securing the solvency of institutions for the care of widows and orphans at universities, shall be added to the income of the institution from its property.

The "Schmidt fund" and the "Von Hackemann fund" shall continue as heretofore. The income from these funds shall be applied in accordance with the provisions of the "funds," and shall be to persons entitled to its benefits, in addition to other amounts due them in accordance with these statutes.

§15. Capital shall be placed at interest on securities or mortgages with the approval of the curatorium of the university.

In so far as this may not be feasible, interest-bearing bonds shall be acquired in which the money of wards can be invested in accordance with existing legal provisions.

VII. ADMINISTRATION OF THE INSTITUTION.

§16. The administration of the institution shall be conducted according to the provisions of these statutes and in accordance with further detailed provisions to be ordered by the minister of religious, etc., affairs and by the minister of finance, as well as in accordance with instructions by the minister of religious, etc., affairs.

The executive committee shall consist of the rector and two directors.

The current business shall be managed by the two directors, under the supervision of the rector.

In judiciary matters the executive committee shall procure the advice of the university judge.

§17. As above, page 136.

§18. This annual report shall be received by two auditors, under the direction of the rector, in connection with the two directors, and then forwarded with the report of the executive committee to the curatorium of the university for inspection and final discharge.

§19. As above, page 136.

§20. As above, page 136.

VIII. MEETINGS.

§§21 to 24. As above, page 137.

IX. AMENDMENTS.

§24. As above, page 137.

X. CONCLUSION.

§25. As above, page 137.

In addition to the general institution for the care of widows and orphans there exists at the University of Breslau in favor of professors' widows also the two funds mentioned in §14 of the above statutes, viz:

1. The Schmidt fund for pensioning professors' widows.
2. The Von Hackemann fund for pensioning professors' widows.

The first of these funds was provided by a famulus or bedel at the former University of Frankfort on the Oder, and was established for the benefit of widows of ordinary professors. It amounts at present to 3,850 marks.

The Von Hackemann fund was provided by Professor of Jurisprudence Von Hackemann, who died on July 30, 1784. The property of the fund consists of real estate in the circuit of Quedlingburg, occupying an area of 36 ha. 42 a. 28 gm., and made productive by renting. In accordance with the provisions of the legacy the income is to be distributed among the widows of ordinary professors and the syndicus of the university.

Both funds having passed from the former University of Frankfort on the Oder to the University of Breslau, or respectively transferred, under §39 of the plan of union of August 3, 1811, to the combined University of Breslau, are administered by the exchequer of the University of Breslau distinct from the institution for the care of widows and orphans.^a

4. THE ROYAL GEORGE-AUGUSTUS UNIVERSITY OF GÖTTINGEN.

The "fund for professors' widows" of Göttingen, existing until April 1, 1889, was administered finally in accordance with the statutes of February 6, 1857, drawn up by the Royal University curatorium of Hanover and amended partially by a ministerial decree of September 14. In accordance with these statutes, every ordinary and extraordinary professor drawing a salary from the exchequer of the university was entitled to become a member of said fund from the time of his appointment. Membership was not compulsory. The annual membership fee was 60 marks. Widows received a fixed annual pension of 800 marks and an additional amount from the surplus of the fund, amounting, in the year 1888, to 440 marks.

Since April 1, 1889, the following statutes, approved by the minister of religious, etc., affairs, under date of December 12, 1889, have been in force:

Statutes of the Professors' Widows and Orphans' Pension Institute of Göttingen.^b

I. MEMBERSHIP.

§1. The following regulations shall apply to the membership of the Professors' Widows Fund of the University of Göttingen, which shall take the name of Professors' Widows and Orphans' Pension Institute:

2. No other persons except those designated under §1 can become members of the institution.

II. ALLOWANCES TO RELICTS; AND III. DISCONTINUANCE OF FEES.

§§2 to 9. As above, page 135 (Berlin).

IV. TRANSITION PROVISIONS.

§10. The regulations of §§ 2, 3, and 5 to 8, clause 1, apply also to the relicts of those who may be members at the time these statutes shall take effect, if these members, in a written declaration, to be handed to the executive committee of the institution on or before January 1, 1890, renounce for their prospective relicts all claims that might accrue to these in accordance with the statutes heretofore in force. Otherwise the regulations of the statutes heretofore in force shall apply to these relicts.

§11. As above, page 136 (Berlin).

§12. As above, page 136, with the following additions:

These relicts may, however, request, in a written petition to be handed to the executive committee on or before January 1, 1890, that they be granted, instead of these pensions, the widows and orphans' allowances, in accordance with §§ 3 to 8.

^a At present the establishment of a relief fund for the relicts of teachers and officials of the University of Breslau is under discussion with prospect of an early conclusion.

^b Paragraphs not printed agree literally with the corresponding paragraphs of the statutes of Berlin (pp. ff.).

This petition must be made jointly for all concerned and must be presented in legal form for all in common.

V. PRIVILEGES OF THE INSTITUTION.

§13. As above, page 136 (Berlin).

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession shall remain under its control.

The income from its property, in so far as the donors of gifts and legacies have not made other dispositions, shall be applied exclusively in defraying the statutory expenses of the institution. The Bandenhoeck legacy, for the benefit of the six oldest professors' widows, shall not be applied to the fulfillment of the obligations of the institution.

The 170,000 marks resulting from the special gift of the Kalenberg real estate and from the legacy of the widow Bandenhoeck shall be separated from the property of the institution and shall be applied for the benefit of the relicts of teachers of the University of Göttingen in accordance with more detailed provisions to be indicated later on. In applying the revenues of this fund all possible care should be taken to furnish compensation for loss to relicts, to be treated in accordance with §§ 3 to 8, in so far as these should be more favorably situated in certain respects under the statutes heretofore in force.

Allowances assigned to the institution by the State in accordance with provisions for securing the solvency of university institutions for the pensioning of widows and orphans shall be added to the income of the institution from its property.

§15. As above, page 141 (University of Bonn).

VII. ADMINISTRATION OF THE INSTITUTION.

§16. The institution shall be administered by an executive committee, consisting of the prorector and five directors, in accordance with these statutes and in accordance with further detailed provisions to be ordered by the minister of religious, etc., affairs and by the minister of finance, as well as in accordance with instructions of the minister of public, etc., affairs.

In judiciary matters the executive committee shall procure the advice of the university judge.

Reports and orders shall bear the signatures of the prorector and one of the directors.

§17. The care of the funds and of financial affairs lies with the exchequer of the university, under the direction and supervision of the executive committee.

The financial year shall be the year beginning with April 1.

The annual financial report shall be made by the exchequer of the university within six weeks after the close of the year.

§18. The annual financial report shall be received by two auditors under the direction of the executive committee and then forwarded, with the report of the executive committee, to the curator of the university for inspection and final discharge.

§19. As above (Berlin).

§20. The directors and the auditors shall be elected at the regular annual meeting of all members by absolute majority of the votes of those present—the directors for five years, the auditors for one year.

Each faculty shall be represented in the executive committee by one of its members.

Each year, on July 1, one of the directors shall withdraw. Among those elected in the first year the order of withdrawal shall be decided by lot.

Every member of the institution is eligible.

The elected officers shall serve without compensation. Should anyone who shall have served in one of these offices for one term be reelected, he may refuse acceptance whenever there are other members who have not served in this office.

VIII. MEETINGS.

§21. As given above, except the last section, which reads: "Then the meeting shall proceed to the required elections."

§22. As above, page 137, except that the prorector is charged with the call of meetings instead of the rector.

§23. As above, page 137 (Berlin).

IX. AMENDMENTS.

§24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889. On this day the statutes of February 6, 1857, together with their amendments and additions, shall cease to have effect in so far as they may not be kept in force by §§ 10 to 12.

In addition to the general provident care on the part of the State, the University of Göttingen enjoys the funds mentioned in §14 of the above statutes of the institution for the care of professors' widows and orphans, as follows:

1. *The Bandenhoeck legacy.*

This is a gift bequeathed in the year 1787 by the widow Bandenhoeck, amounting at that time to 3,000 thalers gold. The interest (at present 471 marks) is equally distributed among the six oldest professors' widows in accordance with the provisions of the legacy, after deduction of the cost of administration.

2. *Auxiliary fund of the institution for the care of professors' widows and orphans.*

Distinct from the property of the institution for the care of professors' widows and orphans of the University of Göttingen, there are furthermore the 170,000 marks resulting from the special donation of the Kalenberg estate. The revenues of this are applied, however, also for the benefit of the relicts of teachers of the University of Göttingen in accordance with the ministerial decree of March 12, 1890 (II. I. 340 II. Aug.) directed to the curator of the university and which is as follows:

"In reply to the acceptable reports of February 8 of the current year, Nos. 515 and 529, I approve the proposition to separate the 11 hypothecated items, amounting in their total to 170,000 marks, together with the interest from April 1, 1889, from the assets of the institution for the care of professors' widows and orphans of Göttingen, and that they be treated and administered hereafter as an auxiliary fund of the institution.

"In accordance with the motion of the executive committee of the institution, I further declare my consent to the proposition that the revenues of this auxiliary fund until further notice be applied in accordance with the following directions:

"1. To increase to 1,400 marks the allowances of the actual widows of ordinary professors who may be subject to a reduction in accordance with §4 of the statutes or who may have failed to make the declaration provided in §12.

"2. To increase also to 1,400 marks the pensions of the widows of actual or deceased extraordinary professors belonging to the institution before April 1, 1889, although so great an increase is neither provided for in §14, section 3, of the statutes nor claimable as a legal right.

"3. To grant to full orphans of a family, in so far as they may be the children of deceased professors or of professors belonging to the institution at the time of the adoption of the new statutes, additional allowances increasing the total amount of orphan pension to 1,400 marks, and this until the youngest orphan shall have completed the twentieth year.

"On the other hand, I hesitate to approve the proposition to apply at the present time for the increase of pensions the remainder of the auxiliary fund.

"The relicts of teachers of the University of Göttingen are, of course, not excluded from the allowance of pensions from the pension fund provided in chapter 119, section 15a, of the appropriation by the state.

"The claims upon this fund, to be distributed only in the measure of existing

necessity, are, however, so great and varied that, as has been repeatedly emphasized, it is possible to pension primarily only widows and minor orphans, and to consider only exceptionally the needs of surviving sons and daughters over 21 years of age as well as other relicts of university teachers.

"If by the provision of §12 of the statutes and by the regulations approved above the widows and minor orphans are extraordinarily favored at Goettingen, and if, on the other hand, as has been previously emphasized by you, there are numerous other needy relicts, it seems preferable that in such cases relief should be given, not from the central fund, but from the auxiliary fund.

"There is at present no occasion for pension increase of actual widows without regard to actual necessity, inasmuch as these have just been essentially favored by an increase in the widows' allowance from 1,240 to 1,400 marks and the addition of sufficient allowance for orphans.

"Accordingly I desire that the revenue of the auxiliary fund, waiving the above-mentioned increases, be used primarily and without further limitation for the relief of needy relicts of university teachers of Goettingen. To the extent in which this revenue shall not be exhausted by this, I am inclined, upon motion to this effect, to grant its use for the increase of pensions. On the other hand, I am quite ready to take under consideration the granting of additional relief from chapter 119, section 15a, should the revenues of the auxiliary fund prove insufficient to grant the necessary relief without reference to the continuance of relief heretofore granted from the central (diesseitigen) fund.

"I have no criticism against the proposition that the granting of relief from the revenues of the auxiliary fund by the executive committee shall be made with your approval."

5. THE ROYAL UNIVERSITY OF GREIFSWALD.

At Greifswald a widows' fund has existed for the professors since 1734. The first statutes of the new institution for the care of widows and orphans at Greifswald, of October 26, 1847, bearing Government approval, were supplanted by new statutes on December 4, 1878. In accordance with these, all ordinary and extraordinary professors were officially held to become members of the institute. However, membership of the institution was also granted to the academic prefect, the judge of the university, the academic forester, the academic purser, and the secretary of the university. Moreover, limited participation in the institution was permitted to the clerk of the university and to the bedels. In accordance with the ministerial decree of January 15, 1885, the further admission of officials of the university was to exclude all allowances of relief from funds of the state. The annual fee of regular members was 72 marks. The widows were allowed annual pensions of 1,200 marks, and the orphans (full and half orphans) stipends of 300 to 1,200 marks.^a

The statutes now in force and approved by the minister of religious, educational, and medical affairs under date of September 19, 1889, are as follows:

Statutes of the Professors' Widows and Orphans' Pension Institute of the Royal University of Greifswald.^b

I. MEMBERSHIP.

§1. The following provisions shall apply to the membership of the Professors' Widows and Orphans' Pension Institute of the University of Greifswald:

Nos. 1, 2, and 3. As above, page 135 (Berlin).

II. ALLOWANCES OF THE RELICTS OF MEMBERS.

§§2 to 8. As above, page 135 (Berlin).

III. DISCONTINUANCE OF FEES.

§9. As above, page 140 (Bonn).

^a These pension amounts were not statutory, but rested upon special temporary approval of the ministry. Compare the ministerial decree of March 15, 1889, under note 12, p. 38.

^b Paragraphs not printed agree literally with the corresponding paragraphs of the statutes of the University of Berlin.

IV. TRANSITION REGULATIONS.

§10. The regulations of §§ 2, 3, and 5 to 8, clause 1, apply also to the relicts of those who may be members at the time of the adoption of these statutes if these members in a written declaration, to be handed to the executive committee on or before the 1st of January, 1890, renounce for their prospective relicts all claims that might accrue to them under the statutes heretofore in force. In this case the now pensioned academic prefect and the chief forester, taking the place of the former academic forester, shall hold the rank of ordinary professors; the university purser, the secretary of the university, and the former secretary of the university, now occupying the position of questor, shall hold the rank of extraordinary professors, and the one-third part of the statutory benefits assigned to the clerk of the university and to the bedels shall be fixed on the basis of amounts due to ordinary professors.

Otherwise the provisions of the statutes heretofore in force shall apply to these relicts.^a

§ 11. As above, page 140 (Bonn).

§ 12. As above, page 140 (Berlin).

V. PRIVILEGES OF THE INSTITUTION.

§13. As above, page 136 (Berlin).

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession, as well as the statutory annual allowance of 5,181 marks from the funds of the university, shall continue under its control.

The remaining divisions of this section as given above, with the following addition to the last division: In future the shares of the institution from promotion and other fees shall be transferred to the exchequer of the university.

§ 15. As above, page 141 (Bonn).

VII. ADMINISTRATION OF THE INSTITUTION.

§§ 16 and 17. As above, page 136.

§ 18. As above, page 136, except that the report is transmitted for inspection, etc., to the curator of the university instead of the minister of religious, etc., affairs.

§§ 19 and 20. As above, page 136 (Berlin).

VIII. MEETINGS OF MEMBERS.

§§ 21 to 23. As above, page 137 (Berlin).

IX. AMENDMENTS OF STATUTES.

§24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889.

On the day designated above the statutes of December 14, 1878, cease to have effect, in so far as they are not kept in force by §§ 10 to 20.

G. ROYAL COMBINED FREDERICK UNIVERSITY OF HALLE-WITTENBERG.

Under the statute of March 23, 1824, approved by the Government, a new institution for the care of widows and orphans was organized for the University

^a Compare the decree of the minister of religious, etc., affairs of the 15th of March, 1889, directed to the curator of the university (II. I. No. 9478 II): "In reply to the report of the 28th of November of last year, I approve the resolution of the general assembly of the members of the institution for the care of widows and orphans at Greifswald granting that the increase of widows' pensions to 1,200, respectively, 400 marks, which expires on the 1st of April of the current year, be extended to the 1st of April, 1890. In order to cover possible deficiencies, the 2,000 marks provided in Section II under expenses of the former professors' widows fund for the current year are to be used first. The interest-bearing investment of this sum, which would prevent the immediate availability of the same, is therefore for the present to be postponed."

at Halle. The old widows' fund of Halle of the year 1777, as well as the widows' fund of Wittenberg, was combined with the new fund. In accordance with the statutes, supplemented in the meanwhile by amendments on April 12, 1869, and on June 20, 1871, all ordinary and extraordinary professors, as well as the librarians of the university and the prosecutor, in so far as they held equal rank with the extraordinary professors, were ex officio members of the institution. Only those teachers of the university that held their professorship as a secondary office and the nonsalaried extraordinaries were excluded. The annual membership fee was 72 marks, for which an annual pension of 1,080 marks was granted to widows and stipends of 270 to 1,080 marks to orphans (full and half orphans).

With April 1, 1889, the following statutes, approved by the minister of religious, educational, and medical affairs, under date of December 17, 1889, went into effect:

Statutes of the professors' widows and orphans' pension institute of the royal combined Frederick University of Halle-Wittenberg.

I. MEMBERSHIP.

§1. The following provisions shall apply to the membership of the professors' widows and orphans' pension institute for the University of Halle-Wittenberg: Remainder of this paragraph as above (Berlin).

II. ALLOWANCES OF THE RELICTS OF MEMBERS.

§§ 2 to 8. As above, page 135 (Berlin).

III. DISCONTINUANCE OF FEES.

§9. Persons who shall obtain membership after the adoption of these statutes shall not be required to issue drafts therefor.

IV. TRANSITION REGULATIONS.

§§ 10 and 11. As above, page 140 (Bonn), except the proviso of the first subdivision of §10, which reads as follows: "*Provided, however*, That the director of the library shall hold rank with the ordinary professors and the questor and secretary of the university with the extraordinary professors."^a

§ 12. As above, page 136 (Berlin).

V. PRIVILEGES OF THE INSTITUTION.

§13. The institution is a public institution and enjoys the privileges of a corporation.

Particularly, it shall be competent to acquire gifts and legacies in accordance with statutory requirements.

V. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession shall continue under its control, as well as the statutory allowance of 3,000 marks by the State.

The remaining two subdivisions of this paragraph as given above, with the following addition at the close: The shares of the institution from fees for certificates of graduation, etc., shall hereafter be turned over to the exchequer of the university.

§ 15. As above, page 141 (Bonn).

^a The provision contained in the second subdivision of §10 has been amended as follows with regard to those members who may have failed to make the renunciatory declaration indicated in the first subdivision of §10:

"The widows of these members shall draw an annual pension of 1,200 marks in quarterly installments in advance, beginning on the day when they shall cease to enjoy the salary or the pension of their husbands. Furthermore, there shall be allowed to a half orphan 300 marks; to two half orphans, 500 marks; to three or more half orphans, 600 marks; to full orphans, double these amounts, payable quarterly in advance until the completed twenty-first year of life, respectively, until the male orphan shall be provided for or the female orphan married."

VII. ADMINISTRATION OF THE INSTITUTION.

§§ 16 to 20. As above, page 141 (Bonn).

VIII. MEETINGS.

§§ 21 to 23. As above, page 137 (Berlin).

IX. AMENDMENTS OF STATUTES.

§24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889.

On the day designated in the above subdivision, the revised statutes of March 23, 1824, together with all amendments thereof, shall cease to have effect in so far as it is not kept in force by §§10 to 12.

In addition to this public provision there exists for needy relicts of professors of the University of Halle-Wittenberg the *William and Augusta fund*, which amounts at present to a little over 10,000 marks, having resulted, with the exception of the initial capital, from annual contributions by the instructors of the university.

On the occasion of the celebration of the golden wedding of Their Majesties the Emperor of Germany and King of Prussia William I and the Empress and Queen Augusta, on June 1, 1879, a collection was made among the professors of the university for the establishment of a fund which, under the name of the William and Augusta fund, should permanently serve the purpose of furnishing support to needy relicts of ordinary and extraordinary professors of the university.

The proceeds of this collection, amounting to 3,345 marks, were transferred by the donors as a gift to university institution for the care of widows and orphans under the following conditions:

§1. The university institution for the care of widows and orphans assumes the obligation of administering the fund of 3,345 marks, as well as all subsequent additions to the fund, together with its other assets and in accordance with the same principles but as an independent auxiliary fund, for the purposes indicated in the following provisions.

§2. Allowances shall be granted only for one year each and only from the interest of the current year.

§3. Until the assets of the fund shall have reached the amount of 10,000 marks, allowances shall be admissible only in cases of most urgent necessity.

§4. Allowances shall be made by the unanimous vote of a committee, consisting of the rector, as chairman, and four members. The latter shall be chosen at first by all the founders. Eventual vacancies shall be filled by the committee, by relative majority of votes. In case of a tie vote the decision shall be made by lot.

§5. Amendments of the statutes, with the reservation of ministerial approval, shall be subject to all the ordinary and extraordinary professors of the university; two-thirds of these shall constitute a quorum, and a majority of two-thirds of these shall decide.

7. THE ROYAL CHRISTIAN-ALBRECHT UNIVERSITY OF KIEL.

A fund for professors' widows had been established at the University of Kiel by the confirmation of the plan for its creation by Christian VII, King of Denmark, on November 11, 1785. This confirmation received an appendix on July 29, 1796.

All actual salaried, ordinary, and extraordinary professors were under obligation to become members of this fund. These had to contribute a yearly fee of two-thirds of one per cent of their salaries. For this the widows received an annual pension of 180 marks and annually a variable additional allowance, which in the year 1888 amounted to 352 marks, from the surplus. In addition to this each widow drew an annual pension of 288 marks from the grand ducal widows' fund.

With the 1st of April, 1889, the following statutes, approved in a decree of the minister of religious, etc., affairs under date of November 20, 1889, went into effect.

Statutes of the professors' widows and orphans' pension institute of the Royal Christian-Albrecht University of Kiel.

I. MEMBERSHIP.

§1. The following provisions shall determine the membership of the fund for professors' widows established at Kiel since November 11, 1785, and which hereafter shall be known as the professors' widows and orphans' pension institute.

The remainder of this paragraph as above, page 135 (Berlin).

II. ALLOWANCES OF RELICTS.

§§2. to 3. As above, page 135 (Berlin).

III. DISCONTINUANCE OF FEES.

§9. Persons who may have become members after the adoption of these statutes shall pay no entrance or other fees.

IV. TRANSITION PROVISIONS.

§10. The provisions of §§2, 3, and 5 to clause 1 of §8 shall apply also to the relicts of those who may be members at the time of the adoption of these statutes, if these members, in a written declaration, to be handed in to the executive committee of the institute on or before December 1, 1889, shall renounce for their prospective relicts all claims that might accrue to them in accordance with the statutes heretofore in effect.

§ 11. As above, page 136 (Berlin).

§12. The claims of the relicts of members deceased before the adoption of these statutes shall be adjudged according to the statutes heretofore operative and in accordance with the provisions of §10, subparagraph 2.

V. PRIVILEGES OF THE INSTITUTION.

§ 13. As above, page 136 (Berlin).

VI. PROPERTY OF THE INSTITUTION.

§§ 14 and 15. As above, page 136 (Berlin), except that § 15 prescribes the approval of the curator of the university instead of the minister of religious, etc., affairs.

VII. ADMINISTRATION OF THE INSTITUTION.

§§16 to 20. As above, page 136 (Berlin), except that §18 designates the curator of the university instead of the minister of religious, etc., affairs as the person to whom report is to be made.

VIII. MEETINGS OF MEMBERS.

§§ 21 to 23. As above, page 137 (Berlin).

IX. AMENDMENT OF STATUTES.

§24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889.

On this day the statutes heretofore in force (confirmation of the plan for the establishment of a distinct fund for professors' widows at the University of Kiel, dated November 11, 1785, with appendix of July 29, 1796), cease to have effect in so far as they are not sustained by §§10 to 12.

8. ROYAL ALBERTUS UNIVERSITY AT KÖNIGSBERG IN PRUSSIA.

For the University of Königsberg an institution for the care of professors' widows and orphans had been established by the governmental decree of July 28, 1831, its statutes published with governmental approval under date of August 4, 1835, by the minister of religious, etc., affairs, and subsequently supplemented with additions on August 17, 1878, and May 16, 1885.

All ordinary and extraordinary professors, drawing at least 900 marks of salary, were with certain exceptions entitled to membership. The annual membership fee was 96 marks for which the widows were granted annual pensions of 80 marks and the orphans (full and half orphans) annual stipends of 200 to 400 marks.

Since April 1, 1890, the following statutes, approved by the minister of religious, etc., affairs, have been in force:

Statutes of the Professors' Widows and Orphans' Pension Institute of the Royal Albertus University of Königsberg in Prussia.

I. MEMBERSHIP.

§1. The following provisions shall determine the membership of the Professors' Widows and Orphans' Pension Institute of the University of Königsberg in Prussia.

Remainder of the paragraph as above, page 135 (Berlin).

II. ALLOWANCES OF RELICTS.

§§ 2 to 8. As above, page 135 (Berlin).

III. DISCONTINUANCE OF FEES.

§9. Members that may attain membership after the adoption of these statutes shall pay no fees nor issue reserve drafts on account of entrance.

IV. TRANSITION PROVISIONS.

§§ 11 and 12. As above, page 140 (Bonn), except the closing proviso of the first subparagraph of §10, which reads as follows: Provided, however, that the secretary of the university, the purser of the university, and the questor shall hold rank with the extraordinary professors.

V. PRIVILEGES OF THE INSTITUTION.

§ 13. As above, page 136 (Berlin).

VI. PROPERTY OF THE INSTITUTION.

§14. The property of the institution heretofore in its possession shall remain under its control, together with the statutory annual allowance of 3,000 marks by the state. Remainder of § 14 as above, page 136 (Berlin).

§ 15. As above, page 141 (Bonn).

VII. ADMINISTRATION OF THE INSTITUTION.

§§ 16 to 20. As above, page 141 (Bonn).

VIII. MEETINGS OF MEMBERS; AND IX. AMENDMENT OF STATUTES.

§§ 21 to 24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889.

On this day the statutes of December 23, 1853, and of March 4, 1854, together with all subsequent additional provisions, shall cease to have effect, in so far as they are not sustained by §§10 to 12.

In addition to this general state provision for the relicts of professors, there is at the University of Königsberg an *auxiliary fund for relicts of teachers and officials of the Albertus University*, the statutes of which, approved by the minister of religious, etc., affairs under date of December 3, 1891, are as follows:

I. GENERAL PROVISIONS.

§1. The object of the auxiliary fund of the university established at Königsberg is to furnish assistance in case of need to the relicts of the instructors—professors, private instructors (*privatdozenten*), and teachers (*lektoren*)—of the university judge, as well as of the officials of the secretary's and treasurer's department of the Albertus University.

Among the relicts are included: (a) Widows, (b) sons and daughters, (c) other near relatives who may have lost in the deceased their provider.

§2. As a rule assistance shall be accorded only to relicts of members of the fund; in very exceptional cases, however, it may be granted also to relicts of nonmembers of the categories named in §1, subparagraph 1, to a total amount not exceeding 10 per cent of annual income as indicated in §9 under a, b, c.

II. MEMBERSHIP.

§3. All teachers and officials designated in §1, subparagraph 1, are entitled to membership in the fund.

§4. Membership may be acquired either by the written pledge of payment of quarterly fee of at least 5 marks, payable in advance, or by the payment of a single contribution of 250 marks.

Relicts of a member that has failed to join the fund within the first year after these statutes have taken effect, or in case of their becoming associated with the university at a later period within the first year after such entrance, may, as a rule, be granted assistance only if the respective member has belonged to the fund for a period of at least five years.

§5. The obligation to pay fees on the part of members shall begin with the first day of the quarter in which membership may have been acquired.

§6. Membership ceases—

- (a) Upon written declaration at any time of voluntary withdrawal, addressed to the executive committee.
- (b) Upon separation from the university in any other way than by retirement as emeritus.
- (c) Upon nonpayment of the fees after a third request by the executive committee.

III. PRIVILEGES OF THE FUND.

§7. The fund shall have the privileges of a corporation. Particularly, it shall be competent to acquire gifts and legacies in accordance with the provisions of the law.

IV. ALLOWANCES FOR RELIEF.

§8. Relief shall be granted on motion of one or several members by the executive committee (§11) on the ground of its own judgment, but in accordance with §§1, 2, 4.

§9. Relief sums shall be derived from—

- (a) The interest of the capital of the fund.
- (b) The annual fees of the members (§4);
- (c) The gifts placed at the free disposal of the fund, after deduction of 10 per cent of the amounts designated under a and b, which (deductions), together with the eventual surplus of the preceding year, shall be capitalized.

§10. Relief sums may be granted in single or periodic payments, the latter for at most three years (not excluding renewal of the grant).

Periodic relief allowances shall cease before the end of the time fixed for them or be reduced by the executive committee whenever the committee shall no longer consider the claimants as needy.

V. ADMINISTRATION OF THE FUND.

§11. The fund shall be administered, without compensation, by the executive committee, which shall consist of the rector (*prorector*)—even if he is not a

member—as chairman, and four members, of whom at least one shall be a jurist, to be elected annually by the regular general assembly (§16).

Should a vacancy occur before the time fixed in the preceding subparagraph, a substitute shall be elected by the executive committee for the unexpired term.

The old executive committee shall conduct affairs until its successor for the coming year shall have organized (§§ 14, 16).

§12. The resolution of the executive committee shall be valid, if it has been approved by at least three votes.

The votes may be taken by written ballot.

§13. The executive committee shall watch over the affairs and interests of the fund in all respects; it shall administer the assets of the fund and shall represent the latter in court and out of court.

In the investment of the capital it shall be determined by the statutory provisions governing the investment of the money of wards.

§14. At the close of the administrative year (April 1 to March 31) the executive committee shall submit a report of its administration to a regular general assembly to be called by it at the time (§16), and also submit to it the annual financial report for inspection and resolution of discharge.

§15. The care of the cash and cash accounts shall be the duty of the exchequer of the university, under the direction of the executive committee.

VI. GENERAL ASSEMBLY.

§16. In addition to the regular general assembly, to be called at the close of each administrative year, and whose object is indicated in §§ 11 and 14, general assemblies shall be called whenever the executive committee may consider this requisite in the interest of the fund, or whenever at least one-tenth of the members may request this in a written petition to the executive committee, stating the object thereof and the reasons therefor. In the latter case the assembly shall be held within two weeks after receipt of the request.

During the fall vacation no general assemblies shall be held.

§17. The calls of assemblies shall state their objects.

§18. General assemblies shall be competent to adopt resolutions, except with regard to the dissolution of the fund (§20), if at least two-thirds of the members are present. However, a second general assembly, called for the same purposes shall be competent to pass resolutions, if at least one week, and at most one month, shall have elapsed between the time fixed for the first and that fixed for the second assembly.

§19. Resolutions shall be passed, except in cases provided for in §20, by simple majority of votes. In case of a tie vote the vote of the chairman of the executive committee, who shall preside also at the general assemblies, shall decide.

VII. CONCLUSION.

§20. Resolutions concerning amendments of the statutes shall require a majority of two-thirds of the members present at the respective general assembly; resolutions concerning dissolution of the fund, a majority of two-thirds of all the members of the fund. Such resolutions shall also require the approval of the minister of religious, etc., affairs.

§21. In the event of dissolution of the fund, its property shall revert to the Albertus University.

As to its disposition, the general council shall determine with due regard to needy relicts of members of the fund.

9. THE ROYAL UNIVERSITY OF MARBURG.

At Marburg the rector, the deans, and professors of the Grand Ducal Hessian University had established, as early as 1688, a "widows' fund," of which every new professor was under obligation to become a member. The original statutes of December 24, 1688, suffered various amendments, primarily by the amendatory act of December 21, 1736, and subsequently by an appendix, approved by a governmental decision of March 13, 1856. Ex officio only the ordinary professors were members of the widows' fund; no others could become members. The

annual membership fee was 36 marks and shares of certain fees (paid to them in their work). The pension of a widow, which in case of her remarriage was transferred to the children, varied according to the annual balance sheet of the fund, and amounted, in 1888, to about 600 marks annually. Orphans received the amount of pension allowed to the widow.

Since April 1, 1889, the following statutes, approved by the minister of religious, etc., affairs, under date of November 18, 1889, have been in effect:

Statutes of the Institution for Pensioning Professors' Widows and Orphans at Marburg.

I. MEMBERSHIP.

§1. The following provisions shall determine the membership of the widows' fund existing at Marburg since December 24, 1688, and which shall be known hereafter as the Institution for Pensioning Professors' Widows and Orphans:

§2. No other persons except those designated under 1 shall become members.

II. ALLOWANCES OF RELICTS.

§§ 3 to 8. As above, page 135 (Berlin).

III. DISCONTINUANCE OF FEES.

§9. Members who shall join the institution after these restrictions become operative shall pay no entrance fee or other fees.

IV. TRANSITION REGULATIONS.

§10. The provisions of §§ 2, 3, and 5 to 8, clause 1, shall apply also to the relicts of those who may be members at the time these statutes shall take effect, if these members, in a written declaration, to be delivered to the executive committee of the institution on or before December 1, 1889,^a renounce for their relicts all claims that might accrue to the latter in accordance with the statutes of December 24, 1688, and the additions thereto of March 13, 1856. Otherwise the relicts of these members shall remain subject to the provisions of the statutes heretofore in force, with the understanding that the amount of each pension (widows', respectively, orphans' pension) shall be fixed at 900 marks annually.

§ 11. As above, page 136 (Berlin).

§12. The claims of the relicts of the members deceased before these statutes became operative shall be adjudged according to the provisions of the statutes heretofore in force and in accordance with §10, subparagraph 2.

V. PRIVILEGES OF THE INSTITUTION.

§ 13. As above, page 136 (Berlin).

VI. PROPERTY OF THE INSTITUTION.

§14. The properties of the widows' fund of the university, as well as the revenues heretofore in its possession, shall remain under its control.

The remainder of the paragraph, as above, page 136 (Berlin), with the following addition to the last subparagraph: The shares from fees for promotions, examinations, etc., assigned to the institution shall hereafter be turned over to the exchequer of the university. The so-called "legacy fees" shall not be levied hereafter. The so-called "rector's salary," amounting to 121 marks 88 pfennigs shall be discontinued in favor of the exchequer of the state.

§ 15. As above, page 136 (Berlin), requiring, however, the approval of the curator of the university instead of the minister for religious, etc., affairs.

VII. ADMINISTRATION OF THE INSTITUTION.

§§ 16 to 20. As above, page 136 (Berlin), requiring, however, in § 18, transmission of the report to the curator of the university instead of the minister of religious, etc., affairs.

^a Changed to "on or before January 1, 1890." (Ministerial decree of January 15, 1890, U. I., 18360.)

VIII. MEETINGS OF MEMBERS.

§§ 21 to 23. As above, page 137 (Berlin).

IX. AMENDMENTS OF STATUTES.

§24. As above, page 137 (Berlin).

X. CONCLUSION.

§25. These statutes shall take effect on April 1, 1889. On this day the statutes of December 24, 1688, together with the additions thereto of March 13, 1856, shall cease to be operative, in so far as they may not be sustained by §§ 10 to 12.

10. THE ROYAL ACADEMY OF MUENSTER AND THE ROYAL LYCEUM HOSIANUM OF BRAUNSBURG.

In connection with the academy at Muenster and the Lyceum Hosianum at Braunsberg there do not exist and have not formerly existed widows' and orphans' funds.

Under the principles published in the Government decree of May 20, 1889, a complete new regulation of the relations of widows and orphans at these places is made by the decree of the minister of religious, etc., affairs of July 20, 1889.

This decree, addressed to the curator of the Royal Academy at Muenster, respectively, of the Lyceum Hosianum at Braunsberg, is as follows (U. L., 17011) :

BERLIN, July 20, 1889.

His Majesty the Emperor and King, in the governmental decree of May 20 of this year, and of which a certified copy is here added, has been pleased to order me to regulate anew the relations of widows and orphans at the universities, the Academy of Muenster, and the Lyceum Hosianum at Braunsberg, in accordance with the provisions published therein. The required means have been appropriated in the provisions of the state appropriations, chapter 119, section 15a.

Accordingly, the following regulations shall go into effect for the Royal Academy at Muenster (respectively the Lyceum Hosianum at Braunsberg) with the 1st of April of this year.

1. The widow and the surviving legitimate children, or children legitimized by subsequent marriage, of professors deceased after March 31 of this year (including emerited professors) who at the time of their death occupied a professorship with salary from the exchequer of the academy (respectively of the Lyceum), shall receive widows' pension, respectively orphans' pension, from the exchequer of the state.

2. The amounts to be paid to widows shall be as follows :

	Marks.
For the widow of an ordinary professor.....	1,400
For the widow of an extraordinary professor.....	1,000

The amounts to be paid to orphans shall be as follows :

For an orphan who has lost both parents (full orphan).....	600
For each additional full orphan.....	400
For a half orphan.....	400
For each additional half orphan.....	250

3 to 7, as above, §§ 4 to 8 (Berlin).

I request your excellency most respectfully to cause payment of the widows' and orphans' pensions due according to the above provision, in so far as there shall be no doubt in individual cases, to those entitled thereto, in monthly installments in advance, from the respective (dortige) Government depository, and to have the amounts entered as additional expenditure in its accounts of the religious and educational administration for April 1, 1889-90, under chapter 119, section 15a. The respective Royal Government officials have received corresponding order by the accompanying decree of to-day. Should there exist, however, in individual cases, doubts concerning one or another of the indicated conditions, or should their determination require expressly the decision of this office (compare No. 4), I shall most respectfully receive the respective report your excellency may be pleased to transmit.

Your excellency is respectfully requested to report to me on or before March 10 of each year the amounts ordered for payment, giving the names of the recipients, as well as the names and official positions of their deceased husbands or fathers.

B.—PROVISIONS FOR THE WIDOWS AND ORPHANS OF OFFICIALS OF THE PRUSSIAN UNIVERSITIES.

The pensioning of the widows and orphans of the officials employed at the Prussian universities, the Academy of Muenster, and the Lyceum Hosianum of Braunsberg is conducted now in accordance with the law applying to all immediate state officials concerning the pensioning of the widows and orphans of immediate state officials of May 20, 1882 (GS., p. 298), respectively the law of March 28, 1888 (GS., p. 48), concerning the discontinuance of the fees of immediate state officials for the widows and orphans' fund, in so far as the statutes of individual institutions for pensioning professors' widows and orphans, operative since April 1, 1889, do not expressly reserve for them their membership claims guaranteed to them in former statutes for the time of their connection with the respective university.

§§ 7 to 13 and 15 to 20 of the law of May 20, 1882, bearing upon this, are as follows:

§7. The widow and the surviving legitimate children or children legitimized by subsequent marriage of an official liable at the time of his death to payment of fees for the widows and orphans' fund,^a shall receive widows' and orphans' pensions in accordance with the following provisions:

§8. The widow's pension shall be one-third of the pension which the deceased could claim, or could have claimed if he had been retired on the day of his death.

The widow's pension shall, however, carry at least 160 marks and not exceed 1,600 marks, under the limitation contained in §10.

§9. The orphan's pension shall be—

1. For children whose mother is living and entitled to a widow's pension, one-fifth of the widow's pension for each child.
2. For children whose mother is not living or not entitled to a widow's pension at the time of the death of the official, one-third of the widow's pension for each child.

§10. Widows' and orphans' pensions, singly or in the aggregate, shall not exceed the amount of the service pension to which the deceased was or would have been entitled had he been retired on the day of his death.

In applying this limitation the widows' and orphans' pensions shall be reduced proportionately.

§11. Upon the withdrawal of widows' and orphans' claim, the widows' and orphans' pensions of the remaining claimants for the following month shall be increased, in so far as they may not as yet be in full enjoyment of the amounts due them under §§ 8 to 10.

§12. Should the widow have been more than fifteen years the junior of the deceased, then the widow's pension, estimated in accordance with §§ 8 to 10, shall be reduced 5 per cent for each beginning year over fifteen, and including the twenty-fifth year.

These reductions of widows' pensions shall not apply to the amount of the widows' pensions to be estimated under §9.

§13. The widow shall have no claim upon a widow's pension if the marriage with the deceased was concluded within three months of his death and the conclusion of marriage was entered into for the purpose of securing the payment of the widows' pension.

§14. The widow of a pensioned official and the surviving children from such marriage shall have no claim upon widows' and orphans' pensions if the marriage shall have been concluded after the retirement of the official.

^a Fees for the widows and orphans' fund have ceased to be levied since April 1, 1888. Article I of the law of March 28, 1888 (GS., p. 48), concerning the discontinuance of these fees, is as follows:

"The fees for the widows' and orphans' funds that are due in accordance with the law of May 20, 1882 (GS., p. 298), concerning pensions for the widows and orphans of immediate state officials shall cease to be levied after April 1, 1888, without detriment to the claims upon widows' and orphans' pensions connected with this duty."

§15. Payment of the widows' and orphans' pensions shall begin with the lapse of the quarter of grace or the month of grace.

§16. Widows' and orphans' pensions shall be paid monthly in advance. The person to whom valid payment shall be made shall be named by the chief of the department, who may, however, transfer such authority to the provincial board.

Installments of widows' and orphans' pensions that shall not have been claimed within four years from the day they may have been due shall be superannuated for the benefit of the exchequer of the state.

§17. The widows' and orphans' pensions can not be legally resigned nor given in mortgage^a or otherwise transferred.

§18. The claim upon widows' and orphans' pensions shall become extinct:

1. For any claimant with the end of the month in which he or she is married or dies;
2. Moreover, with any orphan with the end of the month in which he or she shall complete the eighteenth year of life.

§19. The claim upon payment of a widow's or orphan's pension shall be suspended when the claimant loses German citizenship until its eventual recovery.

§20. In accordance with the provisions of §16, the decision as to whether the widow and orphans of an official shall be entitled to pension and as to the amount of such pension belongs to the chief of the department, who may, however, transfer such authority to the provincial board.

The appeal to courts of justice shall be open to parties concerned. However, the decision of the chief of the department shall have preceded the complaint,^b and such complaint, on penalty of loss of the right to complain, shall be made within six months after the decision of the chief of the department shall have been issued.

C.—PROVISIONS CONCERNING PENSIONS OF PRUSSIAN UNIVERSITY PROFESSORS AND OFFICIALS.

With reference to the periodic service increase of salaries (*Dienstalterszulagen*) the royal decree of October 21, 1897, introduces, however, an essential limitation as to the payments of honoraria. One-half of the honoraria for lectures of regularly paid professors reverts to the exchequer of the state, in so far as the amount paid in for one professor, after deduction of the contribution to the expenses of the financial administration, shall exceed in one financial year 3,000 marks; in Berlin, 4,500 marks. This provision, however, shall apply only with their consent to the professors who may hold positions at the time it becomes operative and as long as they are not transferred to some other professorship. The professors who may have given their consent have been entered into the system of periodic service increase of salaries; the others have retained their former salary. Inasmuch as the reduction in the honoraria has been ordered for all new transfers of regular professorships, deviation from this in individual cases and the payment to the (respective) professor of the entire college honorarium can be granted only with royal consent.

That a professorship should involve the payment of a salary does not seem necessary. The ordinary professors draw salaries regularly; the extraordinary professors in great part; the honorary professors, as such, never. A new principle of administration is not again to appoint extraordinary professors without salaries. Such will, therefore, hereafter be appointed, as a rule, for vacant statutory positions, or, if they hold some other official position, with a salary.

The amount of salary formerly was a fixed sum, determined by the position without claim or even reasonable prospect of an increase of salary. This system has been continued for those professors already in office who did not submit to the deductions from honoraria ordered in the royal decree of October 21, 1897. It is destined in future to die out.

^a With regard to the mortgaging of widows' and orphans' pensions, the provisions of §749 of the civil code of the German Empire shall apply.

^b In accordance with §39, No 1, of the executive law of the German judicial code of April 24, 1878 (GS., p. 230), the provincial tribunal (*Landgericht*) alone is competent for such complaint, inasmuch as widows' and orphans' pensions constitute a part of the salaries, respectively, of the pensions of officials.

Salaries are fixed now as follows:

Ordinary professors draw—

In Berlin, a foundation salary of 4,800 marks, increased in six service periods of four years each by 400 marks each.

In other universities, a foundation salary of 4,000 marks, increased in five service periods of four years each by 400 marks each.

Extraordinary professors draw—

In Berlin, a foundation salary of 2,400 marks, increasing in six service periods of four years each by 400 marks each.

In other universities, a foundation salary of 2,000 marks, increased in five service periods of four years each by 400 marks each.

In special cases, however, different salary conditions may be agreed upon.

This schedule of salaries does not apply to professors—

1. Who hold or have held some other office entitling them to pension or to remuneration for loss of time while waiting for a promised position (*Wartegeld*);

2. Who hold in addition to the professorship a private position involving a regular continuous income (except a purely scientific occupation);

3. Who are engaged in medical practice or other practical, profitable vocation, or who are likely to be so engaged;

4. Who draw an extra salary from the Berlin Academy of Sciences or from the Göttingen Association of Sciences; and

5. Who, with their consent, are relieved from the duty of lecturing, or concerning whom, after decision by the minister of education, assumptions exist under which nonjudicial officials can be retired.

In the year 1899 these exceptions were found to exist, the first with 34 (11 ordinary, 23 extraordinary), the second with 1, the third with 70 (40 ordinary, 30 extraordinary), excluding physicians, the fourth with 5, and the fifth with 32 (22 ordinary, 10 extraordinary) professors; in all, therefore, 142.

Of a total of 738 (530 ordinary, 208 extraordinary) professors, 192 already draw the maximum salary fixed by the new regulations; 142 withdrew under the application of the above principles of exclusion. There remained, therefore, 404 participants, to whom the new schedule of salaries as such would have applied. Of these, however, 43 failed to join the new system, preferring not to submit to the deduction of lecture honoraria.

By special agreement between the ministry of instruction and the ministry of finance, moreover, the following provisions have been made:

If a professor, in addition to his salary as professor, draws a continuous income of 1,800 marks from public or private vocation, this will be credited to the increments of salary. This, however, does not include—

1. The income from literary activity of a purely scientific character;

2. Honoraria for university lectures and examination fees, with the exception of promotion fees;

3. Regular salaries of the members and secretaries of the Berlin Academy of Sciences and of the Göttingen Association of Sciences and of the members of the Institute for the Survey of the German Seas at Kiel; and

4. The salaries and remunerations of the teachers of the Emperor William Academy at Berlin and of the Marine Academy at Kiel.

This involves five cases.^a

The regular ordinary and extraordinary professors, like all other immediate State officials, have claim, in addition to their salaries, to rental money in accordance with the law of May 12, 1873, and the amendment of June 28, 1875, (G. S., 1873, p. 122; 1875, p. 370.)

The amount of rental money is determined by the service rank involved in the office and not by the personal higher rank. Accordingly, the rentals of the fourth and fifth classes, the same for both, apply to professors. It amounts annually, in Berlin, to 900 marks; for the first service class, 660 marks; the second, 540 marks; the third, 480 marks; the fourth, 420 marks, and the fifth, 360 marks. Of the Prussian university cities Bonn, Breslau, Halle, Kiel, Königsberg, and Münster belong to the first class; Göttingen, Greifswald, and Marburg to the second; Braunsberg to the third.

Professors are not pensioned. They have, therefore, no claim on pensions.

The relics of professors have, primarily, claim upon gratuities of competency (*Gnadenkompetenzen*) according to provisions for other State officials

^a The entire material concerning the new schedule of salaries has been entered in the publications of the House of Delegates, 1899, Suppl. Vol. 3, No. 71.

under the law of February 6, 1881 (G. S., 1881, p. 17). These allowances consist in the continuance of the official salary for the three months next following the month of death, excluding the month of death. This allowance is not combined with the heritable estate, but is assigned to the widow, the children, and grandchildren of the official—even if they are not heirs—in such a way that no creditor of the deceased can lay claim to it. Moreover, the chiefs of departments may assign the gratuities of competency also to other persons whose only provider was the deceased. The year of grace (*Gnadenjahr*), formerly customary in many instances for relicts of professors, is discontinued for the future. The gratuities of competency can be granted only from salary and rental money. On the other hand, the honorarium for lectures already paid shall be returned if at the death of a professor in the course of a semester the lecture course is not in its essentials completed.

The relicts have further claim on widows' and orphans' pensions.

Before the new regulation of pensions of relicts a professor, in accordance with the ministerial order of June 9, 1838, could buy for his wife membership either in the General Pension Institute for Widows or in the institution for the pensioning of professors' widows and orphans connected with every university. With one or the other of these funds, however, the insurance was obligatory. Now the law of May 20, 1882, concerning provision for the widows and orphans of immediate State officials (G. S., 1882, pp. 298 ff.), has abrogated these practices, inasmuch as it prohibits the officials from joining the General Pension Institute for Widows and imposes upon them, on the other hand, the obligation of paying widows' and orphans' fees into the exchequer of the State. With the abrogation of these widows' and orphans' fees by the law of March 28, 1888, the former insurance was supplanted with the direct pensioning of the relicts by the State. Inasmuch, however, as the new plan of pensioning the relicts referred only to the State officials entitled to service pensions, the professors were excluded therefrom. For them pensioning continued through the funds for the pensioning of professors' widows and orphans.

Now since all other professional State officials were assured pensions for widows and orphans by the State without payment of fees, it seemed unfair that only the professors should pay such fees. The payment of the fees of the professors was, therefore, also assumed by the State under maintenance of the existing widows' funds. On the other hand, since the professors draw no service pensions, the amounts of the widows' and orphans' pensions had to be fixed independently. These new provisions for the pensioning of the widows and orphans of university professors are contained in the royal decree of May 20, 1889.^a After 1897-98 considerable increase has been ordered.

The relicts of professors holding positions with salaries from the exchequer of the university receive, accordingly, the following pensions:

	Marks.
1. Widows' pensions:	
The widow of an ordinary professor	1,650
The widow of an extraordinary professor	1,300
2. Orphans' pensions:	
A whole orphan	720
Each additional whole orphan	480
A half orphan	480
Each additional half orphan	300

The fees heretofore paid by the members for the funds are discontinued. The payments of the funds are defrayed from the income of their assets, and in so far as these may be insufficient from contributions by the State. For the professors of the academy at Münster and the Lyceum Hosianum at Braunsberg, which heretofore had no special funds, the payments are simply assumed by the State. In so far as the State contribution, estimated at annually 160,000 marks, is not required to meet the obligations of the funds, the surplus is to be turned over to existing funds for the increase of their assets.

In order to bring their organizations into agreement with the provisions of this decree, all the institutions for the pensioning of professors' widows and orphans at the nine universities revised their statutes in special general assemblies.^b

The membership of the funds is now limited to the professors that occupy positions with salaries from the exchequer of the university. They are *ex officio*

^a Central-Blatt für die gesamte Unterrichts-Verwaltung i. Pr., Suppl., 1890, p. 3.

^b Reprint of statutes above, pp. 3 ff.

members of the institution. Others, however, that were members at the time the new statutes went into effect and that do not draw salaries from the exchequer of the university retain their membership during their connection with the university.

The payments by the funds are determined by the decree of May 20, 1889.

Special reservations were required with regard to those widows that were considerably younger than the deceased husband. If the widow was younger than the deceased by more than fifteen years, the widow's pension was reduced 5 per cent for each beginning year of the difference in age over fifteen to twenty-five, inclusive. The widow has no claim to a pension if the marriage with the deceased was contracted within three months of his death and if the minister of education has reached the conviction on the ground of established facts that the marriage was contracted only in order to secure for the widow the payment of the pension.

The payment of the widow's and orphan's pension begins after the lapse of the period of grace and is made monthly in advance. The claim becomes extinct (1) for each claimant with the end of the month in which he or she is married or dies, (2) for each orphan, moreover, with the end of the month in which he or she completes the twenty-first year of life. The claim is suspended (1) if the claimant loses German citizenship until its eventual recovery; (2) as long as the claimant is entitled to a widow's or orphan's pension equal in amount to this pension on the ground of the imperial law of April 20, 1881, or of the Prussian law of May 20, 1882.

The levying of fees on the part of members is, in general, discontinued. An exceptional position is occupied only by those members who occupy a salaried imperial or State office with title to pension, and who are nonsalaried professors. For the future such persons are wholly incompetent to become members; their existing membership rights, however, remain undisturbed. Their relicts, therefore, draw at the same time the payments from the State and from the university institutions. In return, however, the members are not relieved from the fees to the university funds.

Special transition provisions were found requisite for those members that had already acquired claims for their future relicts on the ground of the older statutes. To these the right of choice was conceded between the older claims and the newly established pension regulations.

On the whole, funds (*Kassen*) established as individual institutions with corporate rights continue to exist. The fees heretofore levied are supplanted by State contributions. The self-administration of the institutions is conducted in accordance with the same statutes by members of the university.

Inasmuch as the provisions concerning service pensions do not apply to the university professors, there is an utter lack of statutory prescriptions in this direction. Consequently assignment of service pensions to professors, in so far as they have not received special promises at their appointment, could be made only with the approval of the King. Practically another method has been chosen. The professor draws, during his lifetime, his full salary. He is, however, upon his motion, if he feels himself unable to perform service, relieved of the duty of lectures. If this motion has been granted, or if the professor otherwise seems incapable of performing his full duty, a substitute professorship, to be subsequently abandoned, is established whose occupant at the death of the professor incapable for service is promoted into his position without further action.

The regular professors draw, primarily, salaries. This amounts, at Charlottenburg, on an average, to 6,500 marks; at Hanover and Aachen, on an average, to 5,500 marks. To this is added, as per schedule, the rental of the first service class of, annually, 660 marks. The docents draw only remunerations.

Furthermore, a share in the honoraria for instruction is assured to all teachers in office, and this to the regular professors as not pensionable income. This share is one-fourth of the instruction fees collected for their instruction, or 10 marks from each practitant, with exercises for the entire day. This share of the honorarium must, however, not exceed 3,000 marks annually for a single teacher. As to the remainder, the teacher earns the honorarium for the State. The State, therefore, is financially interested that the lectures be delivered for fees (*entgeltlich*). The holding of free (not paid for) lecture courses is therefore prohibited without higher approval.

Finally, the minister has at his disposal a special supplementary fund for the employment of prominent teachers. The regular professors are pensioned, like other State officials, under the pension law of March 27, 1872 (G. S. 1872,

p. 268) and the amendments of March 31, 1882 (G. S. 1882, p. 133) and of April 30, 1884 (G. S. 1884, p. 126).

If retirement ensues after the completed tenth year of service, but before the completed eleventh year, the service pension amounts to fifteen-sixtieths of the service income and is increased by one-sixtieth each successive year, however, not to exceed forty-five sixtieths. If the service pension is paid before completion of the tenth year of service, it amounts to fifteen-sixtieths, and, unless there is a legal pension claim, to at most fifteen-sixtieths (§8, amendment of March 13, 1882). In computing the service pension the last service income, exclusive of dividends, gratifications, etc., is taken as a basis—and in this, payments in kind in their average, the rental in an average of all the service classes, and of a service income in excess of 4,000 marks, only one-half (§10). The time of service, in so far as the official has not furnished previous service, is computed from the taking of the official oath (§13). Even the period of being at disposal for appointment, the mere preparatory service, and active military service are included, but time of service before the twenty-first year of life only if it was military service in time of war (§§14 to 16). For each campaign in which the official actually met the enemy or followed mobilized troops into the field one year is added (§17). The addition of the period of imprisonment in a fortress for one year or longer and of detention as prisoner of war can take place only under particular circumstances and with royal approval (§18). With royal approval, too, there may be further admitted the service as attorney or notary, in church or school, in parliament or at court, in foreign diplomatic service, or in practical preparation for State service in so far as such preparation may have been customary for the attainment of appointment (§19).

The service pensions are paid monthly in advance (§25); they can not be transferred or mortgaged (§26). The pension is suspended if the official loses German citizenship until its eventual recovery, and if and as long as he draws a service income in the service of the Empire or of the State, to the extent in which this service income, together with the pension, exceeds the amount of the service income drawn by the official before he was pensioned (§27).

The docents have no claim whatever upon service pensions. On the other hand, in accordance with the above provisions, if the docent later on obtains a regular professorship, his service as docent will also enter into the computation of his service pension.

Finally, provision for the relicts is made only with reference to the regular professors.

The relicts—viz, widows, children, and grandchildren—primarily and under the general provisions are entitled to the so-called “competency allowances” (*Gnaden-Kompetenzen*) under the law of February 6, 1881. In this respect there is no difference between the regular professors of the technical high schools and the university professors. Since, however, only the former are entitled to pensions (service pensions), the competency gratuities of their relicts include also the service pensions. Of this, however, in addition to the month of decease only a single additional gratuity month is granted.

The title to service pension on the part of regular professors of technical high school indicates their equality on the whole with other State officials with reference to the pensioning of relicts. This is regulated by the laws of May 20, 1882 (G. S. 1882, p. 298), of March 28, 1888 (G. S. 1888, p. 48), and June 1, 1897 (G. S. 1897, p. 169). After the abrogation in 1888 of the obligation of officials to pay widows and orphans fees, the pensioning of their relicts is now as follows:

The widow's pension consists of 40 per cent of the service pension to which the deceased was entitled or would have been entitled if he had been retired on the day of his death. The widow's pension must, however, not exceed 2,000 marks for widows of officials of the fourth and higher rank classes to which the regular professors belong (§8, law of June 1, 1897, Art. I). The orphans' pension is (a) for children whose mother is living and at the time of the official's death entitled to a widow's pension, one-fifth of the widow's pension for each child; (b) for children whose mother is not living or not entitled to a widow's pension at the time of the official's death, for each child one-third of the widow's pension (§9). Widow's and orphans' pensions, singly or in the aggregate, must not exceed the amount of the service pension to which the deceased was or would have been entitled had he been retired on the day of his death. In applying

this limitation the widows' and orphans' pensions are proportionately reduced (§10). In the case of a widow who is younger than her deceased husband by fifteen years the amount is reduced by one-twentieth for each beginning year of the difference in age up to the twenty-fifth year, inclusive; the amount of the orphans' pensions, however, remains the same. If the marriage lasted five years, one-twentieth of the reduced amount is added for each beginning year of its further continuance until the full amount shall be reached (§12, law of June 1, 1897, Art. II). The claim to a widow's pension is lost if the marriage with the deceased official was contracted within three months of his death or clearly for the purpose of procuring the widow's pension. Similarly, widows and children of a marriage contracted after the pensioning of an official have no title (§13). The reliefs of an official not entitled to service pension, but who might have been granted such pension, may be accorded widows' and orphans' pensions by the chief of the department in connection with the minister of finance, and the computation of the amounts with reference to the consideration of certain periods may be made by them under the same assumptions that apply to officials (§14). The widows' and orphans' pensions are paid monthly in advance after the lapse of the periods of grace (§§15, 16). The pensions are not transferable nor mortgagable (§17). The claim becomes extinct for each claimant with the lapse of the month in which he or she is married or dies; moreover for each orphan with the lapse of the month in which he or she completes the twenty-first year of life (§18). The claim is suspended when the claimant loses German citizenship until its eventual recovery (§19).

II. THE EMPEROR WILLIAM UNIVERSITY, OF STRASSBURG.

A.—PROVISIONS FOR THE WIDOWS AND ORPHANS OF PROFESSORS, ETC.

At the Emperor William University, of Strassburg, the pensioning of the widows and orphans of professors was first regulated under the law of December 25, 1873, (G Bl., p. 518), as follows:

(a) That the widow of any ordinary or extraordinary professor, salaried from the exchequer of the university, shall receive as pension from the public treasury one-fifth of the last official salary paid the deceased, excluding supplementary allowances; provided, however, that this shall amount to at least 1,200 francs, and at most 2,000 francs.

(b) That each orphan shall receive 400 francs. Widows and orphans fees are not levied.

Law of December 25, 1873, concerning the pensions of the widows and orphans of professors.

§1. The widows and orphans of the ordinary and extraordinary professors of the University of Strassburg, salaried from the exchequer of the university, shall receive pension from the public treasury.

The amount of such pension shall be:

(a) For the widow, one-fifth of the last official salary paid the deceased from the exchequer of the university, excluding supplementary allowances; provided, however, that this shall be at least 1,200 francs and at most 2,000 francs.

(b) For each orphan, 400 francs.

As orphans are to be considered the children designated in §1 of the law of December 24, 1873, concerning the pensions of the widows and orphans of officers and teachers.

§2. The payment shall begin with the lapse of the day up to which the deceased has been granted salary. It shall be ordered by the superior [first?] president.^a

§3. The paragraphs 4, 7, 11, and 13 of the law of December 24, 1873, concerning pensions of the widows and orphans of officials and teachers shall apply also to pensions granted under this law.

The provisions of the law of December 24, 1873, referred to above, are as follows:

^a Now by the ministry, §3, law of July 4, 1879.

§1. The widow, as well as the legitimate children or children legitimized by subsequent marriage, of an official, etc., shall receive pension from the public funds.

§4. The widow shall have no claim to a pension if the marriage has been dissolved or if, upon motion of the husband, separation from bed and board has been pronounced.

§7. Widows' and orphans' pensions shall be paid monthly in advance.

§11. Payment of pension shall cease:

- (a) For the widow with the end of the month of her death or remarriage;
- (b) For each child with the end of the month of his or her death or completion of the eighteenth year of life; and
- (c) For girls that shall be married before the completion of the eighteenth year of life, with the end of the month in which the marriage shall have been contracted.

§13. The claim to a widow's and orphan's pension shall be suspended:

- (1) If the claimant shall lose German citizenship until eventual recovery of the same; and
- (2) If, and as long as, the claimant shall draw in the service of the Empire, of the State, or in the public schools a service income, in so far as this shall exceed the amount of the pension.

Pensions of the widows and orphans of officials.

The pensioning of the widows and orphans of the officials of the University of Strassburg is conducted under the law of December 24, 1873, concerning the pensions for widows and orphans of officials and teachers (G. Bl., p. 515.) as follows:

§1. The widow, as well as the legitimate children and children legitimized by subsequent marriage of an official who, under the provisions of the law of December 23, 1873, concerning the statutory conditions of officials and teachers, shall have drawn a service pension or would have been entitled to draw such pension had he been retired on the day of his death, shall receive pensions from the public funds.

The widows and orphans of an official who, under §75 of the imperial law of March 31, 1873, concerning the statutory conditions of imperial officials, have not been granted a service pension shall not be entitled to pensions.

If an official dies who could have been granted a service pension under §37 or §39 of the imperial law of March 31, 1873, the widow and orphans may be granted pensions from the public funds.

§2. The claim to pension shall be valid for widows and orphans whether the official at the time of his decease has been in active service or in temporary retirement or under service pension.

§3. The widow and orphans of a pensioner whose claim to service pension had been suspended at the time of his decease because of his loss of German citizenship (§57, No. 1, of the imperial law of March 31, 1873) shall have no claim to a pension.

§4. (See above, p. —.) [Can not be found.—Transl.]

§5. The decision concerning whether and what pension shall be paid to the widow and orphans of an official shall be made by the first president,^a the grant of the pensions permissible under §1, subparagraph 3, by the imperial chancellor.^b

In cases in which, under §52 of the imperial law of December 31, 1873, an official retiring from service may be credited with certain periods in the computation of his time of service the imperial chancellor^c may permit such credit also in the computation of the widows' and orphans' pensions.

§6. The payment of pensions to widows and orphans begins with the lapse of the quarter or month of grace (§§7, 31, 69 of the imperial law of March 31, 1873^d). Should there be no provision for the grant of a quarter or month of

^a Now by the ministry (§3, law of July 4, 1879).

^b For the imperial chancellor the governor has been substituted (§2, law of July 4, 1879).

^c Now the ministry (§3, law of July 4, 1879).

^d §69, subparagraph 1, of the imperial law of March 31, 1873, has been superseded, under the law of May 25, 1887 (introduced into Alsace-Lorraine by imperial decree of November 21, 1887), by the following regulation: "If a service pensioner leaves a widow or legitimate progeny the service pension shall continue to be paid for one month in addition to the month of his decease. To whom the payment shall be made shall be decided by the highest imperial authority, which, however, shall have the privilege of transferring such power of decision to the higher imperial authority."

grace, the payment shall begin with the lapse of the day up to which the deceased was entitled to service income or pension.

§7. Widows' and orphans' pensions shall be paid monthly in advance.

§8. The pension of a widow amounts to one-third of the service pension to which the deceased was entitled or would have been entitled had he been retired from service on the day of his death.

The pension, however, with the limitation under §10, shall carry at least 200 francs and shall not exceed 2,000 francs.

§9. The orphan's pension shall carry:

(a) For children whose mother is living and entitled to pension, one-fifth of the widow's pension for each child.

(b) For children whose mother is not living or no longer entitled to pension, one-third of the widow's pension for each child.

§10. The pensions payable to widows and orphans shall not exceed, either singly or in the aggregate, the amount of the service pension of the deceased to which he was entitled or would have been entitled if he had been retired from service on the day of his death.

In applying this limitation, the respective single pensions shall be proportionately reduced.

§11. (See above, p. —.) [Can not be found.—Transl.]

§12. On the death and remarriage of a pensioned widow, the increase of the orphans' pensions under the provisions of §§ 9 and 10 shall become effective at the end of the term designated in § 11, letter a.

On the elimination of a child entitled to pension, its pension shall be added proportionately to the remaining claimants, beginning with the term designated in § 11, letters b and c, in so far as these are not as yet in full enjoyment of the amounts due them under §8 or 9.

§13. (See above, p. —.) [Can not be found.—Transl.]

§14. (Is repealed by art. 6, §3, of the law of December 23, 1873.)

§15. Assurances of future grants of pensions to the relicts of individual officials or classes of officials by the Emperor or the imperial chancellor before the promulgation of this law shall remain valid in so far as the provisions of this law are not more favorable.

§16. The provisions of this law shall apply also to the widows and orphans of officials who were pensioned during the period from the 9th of June, 1871, to the time when the law concerning the rights of officials and teachers of December 23, 1873, took effect, and who at the promulgation of the present law are still living.

§17. The provisions of the present law concerning the pensions for widows and orphans of officials shall apply also to the orphans of those female teachers who, under the law concerning the rights of officials and teachers of December 23, 1873, are entitled to service pension as well as, respectively, to the widows and orphans of the members of the gendarmerie.

Auxiliary fund.

For the benefit of the relicts of the professors and lecturers, as well as of the secretary of the university, the questor, and the curatorial secretary of the Emperor-William University of Strassburg, there exists, finally, since the year 1882 at this university an auxiliary fund, with the object of providing for the relicts of its members in case of need allowances, the value of which is determined chiefly by the amount of available means, the number of persons requiring assistance at the time, and the urgency of need.

Membership for the persons designated above is optional.

Each member has to pay an entrance fee of 30 marks and a quarterly fee of 5 marks. The obligation to pay an entrance fee and quarterly fees may be superseded at any time by a single payment of 300 marks.

The statutes of the auxiliary fund of the Emperor-William University of Strassburg, approved by the Government under date of August 19, 1882, are as follows:

I. GENERAL PROVISIONS.

§1. The fund shall be known as "auxiliary fund of the Emperor-William University of Strassburg;" it shall have its seat at Strassburg and shall serve the purpose of providing assistance for the relicts of its members in case of need.

§2. The fund is a part of the organization of the university. It is, however,

endowed with independent juridical personality and entered in the class of institutions for the public benefit.

§3. The administrative year of the fund coincides with the statutory year of public administration.

II. MEMBERSHIP.

§4. The following persons shall be entitled to membership of the fund:

1. The professors and lecturers of the university.

2. The secretary of the university, the questor, and the curatorial secretary.

§5. Membership shall begin on the day of entrance.

Entrance is secured by written request addressed to the executive committee.

§6. Membership shall cease—

1. On the day of voluntary resignation, which may be presented at any time, and is secured by written request to the executive committee.

2. At the termination of the condition conveying title to membership; entrance upon the list of pensioned officials or emerited professors shall not terminate membership.

III. ENTRANCE FEES AND QUARTERLY FEES.

§7. Each member shall pay an entrance fee and quarterly fees.

§8. The entrance fee shall be 30 marks. It is payable within six months after joining.

§9. The quarterly fee is fixed at 5 marks and is payable in advance.

Members joining the fund during a current quarter shall nevertheless be charged with the full quarterly fee and shall pay this immediately after joining.

§10. For those members who draw salary from the university fund the entrance fees and quarterly fees will be collected when salaries are paid, a receipt being issued, in case they have no objection.

§11. The obligation of payment of the entrance fee and the quarterly fees may be superseded at any time by the payment of a single fee of 330 marks. (In the introduction, p. 98, "300 m."—Transl.)

IV. RELIEF ALLOWANCES.

§12. The means for allowances shall as a rule be taken only from the regular income under the detailed provisions of the two following paragraphs.

§13. The regular income consists of the revenues of the capital assets for each administrative year and of the membership fees, contributions, and gifts made for this purpose.

§14. Of the regular income a portion, which shall amount to at least 10 per cent, shall be added to the capital, according to the judgment of the executive committee. The entire remainder shall be available for relief allowances.

§15. Only the relicts of those members that shall have belonged to the fund until their death shall have claim to relief.

§16. As relicts in the sense of the above paragraphs shall be considered: (1) the widows, (2) the children, (3) other near relatives who constituted a family with the deceased and who in him have lost their provider.

§17. Only necessity furnishes claim to assistance.

The value of the allowances is determined chiefly by the amount of available means, the number of persons needing assistance at the time, and the urgency of need. Special attention shall be paid in this to doubly orphaned children.

§18. Each member shall have the right to submit to the executive committee written requests for the relief of other members. Should the executive committee deny the request, he may appeal to the general assembly to be called for this purpose.

Otherwise the executive committee shall decide upon the granting of relief allowances according to its free judgment under the provisions of §§ 12 to 17.

V. ACCOUNTANT.

§19. The duties of accountant shall be performed, without compensation, by the questor, under direction of the executive committee.

VI. EXECUTIVE COMMITTEE.

§20. The executive committee shall consist of five members, to be elected annually by the general assembly. Reelection is permitted.

Should a vacancy occur before the time designated above, the executive committee shall elect a substitute for the unexpired term.

§21. At the beginning of each administrative year the executive committee shall elect from its midst a chairman for the term of this year.

Should there be temporarily no elected chairman, or should the chairman be absent, his office shall be filled by the member of the executive committee oldest in years.

The chairman shall direct the business of the executive committee and shall execute in its name the necessary written documents.

§22. The executive committee shall be competent to pass resolutions if at least three of the members are present at the meeting. Resolutions shall be passed by simple majority; in tie votes the vote of the chairman shall decide.

Simple matters may be dispatched by the chairman, if no member objects, by the circulation of a writing.

§23. The executive committee shall guard and guide the affairs and interests of the fund in every respect.

It shall administer the assets of the fund.

It shall represent the fund in and out of court.

§24. Within the statutory sphere of its duties the executive committee is wholly independent under the restrictions of §§ 18 and 33, subparagraph 2.

§25. Toward the close of the administrative year the executive committee shall submit to the general assembly a report of its administration, as well as the annual financial report for inspection and eventual discharge. The business report shall be transmitted after the meeting to the academic senate for inspection.

VII. GENERAL ASSEMBLY.

§26. The general assembly shall consist of all the members.

§27. The call for the general assembly shall be issued by the executive committee.

§28. Annually, toward the close of the administrative year, a regular general assembly shall be convened.

A special general assembly shall be called whenever the executive committee considers this necessary in the interest of the fund, or whenever at least one-tenth of the members request it in a written petition addressed to the executive committee stating the object and the reasons therefor. In the latter case the general assembly shall be convened within the next fourteen days after receipt of the request.

General assemblies shall not be convened during the academic vacations.

§29. The object of the general assembly shall be stated in the call. No resolutions can be passed concerning matters not so announced.

§30. The chairman of the executive committee shall preside at the general assembly.

§31. The general assembly is competent to pass resolutions whenever at least one-third of the members are present. However, the second general assembly called for the same purpose shall be competent to pass resolutions even with fewer members present, if between the date of the first and that of the second meeting at least a week or at most a month shall have passed.

Resolution concerning amendments of the statutes or the dissolution of the fund shall under all circumstances require the presence of at least one-half of the members and governmental approval.

§32. Resolutions shall be passed by simple majority; in case of a tie vote the vote of the presiding officer shall decide.

§33. The general assembly shall have supervision of the administration on the part of the executive committee.

All resolutions of the executive committee concerning the purchase or sale of real estate, the conclusion of contracts, and the preferment of juridical complaints or the answering of the same shall be subject to its approval.

It shall decide all motions concerning the amendment of the statutes. Moreover, it shall attend to the duties assigned to it under §§ 18, 20, and 25.

CONCLUDING PROVISION.

In case of the dissolution of the fund its property shall revert to the university. As to its disposal, the *plenum* shall decide with appropriate regard to needy relics of members of the fund.

B—PROVISIONS CONCERNING PENSIONS OF PROFESSORS AND OFFICIALS OF THE UNIVERSITY OF STRASSBURG.

[From "*Hosius*, The Emperor William University of Strassburg, Strassburg, 1897," pp. 176 to 188 and 202 to 203.]

F. THE RIGHTS OF PROFESSORS AS OFFICIALS.

(aa) *Payment.*

In so far as payment is provided for professors it consists regularly of salary and increment; compare statutes of university, § 45. The latter is eliminated in the cases of emerited professors; the salary remains and serves at the same time as basis for computing the pensions of relicts. For the amount of payments there exist no fixed provisions. Actually at this time the following payments apply:

Theological faculty:	Marks.
Ordinary professors-----	5, 000— 8, 000
Extraordinary professors-----	3, 800— 4, 000
Faculty of jurisprudence and politics:	
Ordinary professors-----	6, 000—13, 500
Extraordinary professors-----	3, 000— 4, 800
Medical faculty:	
Ordinary professors-----	4, 800—13, 500
Extraordinary professors-----	2, 000— 3, 600
Philosophical faculty:	
Ordinary professors-----	4, 800—10, 200
Extraordinary professors-----	2, 700— 4, 000
Faculty of mathematics and science:	
Ordinary professors-----	6, 000—10, 800
Extraordinary professors-----	2, 000— 4, 200

In detail the following applies to payments:

(a) It shall be paid without deduction if the professor as deputy to the imperial diet or on account of sickness can not attend to his official duties; also in case of leave of absence, in so far as this leave is not for a long period (Comp., p. 170). A professor, however, who absents himself without leave loses his income for the period of such absence (R. B. G., § 14).

(b) Payments are made in advance and quarterly, under the resolution of the federal council (Bundesrath) of May 30, 1874, promulgated by the first president on June 10 of the same year, inasmuch as the professors are appointed by the Emperor or by the imperial chancellor (governor). (§ 5, subparagraph. 1, R. B. G., and Coll. of the Judicial Administration II, p. 233.)

(c) The payment for the month of decease is always due for the entire month (Comp., R. B. G., § 4).

(d) With reference to the mortgaging of payments (as well as of the salaries of emerited professors of the quarter of grace and of the pensions of widows and orphans) compare P. O., § 749, subparagraph 1, Nos. 7, 8, and subparagraph 2. The respective claims can be ceded, mortgaged, or otherwise transferred only in so far as they are subject to attachment (R. B. G., § 6, subparagraph 1).

(e) Under § 4, R. B. G., and in the absence of special stipulation, the claim to payment would begin with entrance upon office; actually April 1 or October 1, as the first day of the semester for which the appointment was made, is always fixed as the day on which payment begins.

(f) If a professor in service leaves a widow or legitimate progeny, the relicts are entitled for the quarter following the month of decease (quarter of grace) to the full payment of the deceased. The payments include also eventual other emoluments—e. g., remunerations for special services, as those of the prosecutor—which are not to be considered as remunerations for cash expenses. To whom payment is to be made is decided by the secretary of state as the competent authority. The quarter of grace (*Gnadenquartal*) can not become subject to attachment. In the absence of the relicts above designated the quarter of grace may be paid with the approval of the secretary of state, as the highest state authority for such cases, if the deceased leaves in needy circumstances parents, brothers or sisters, nieces or nephews, or adopted children whose provider he was, or if his estate is not sufficient to defray the expenses of his last sickness and burial (R. B. G., §§ 7, 8).

(g) If the deceased professor lived in service quarters, the provisions of § 9 of the R. B. G. apply in general. Under these the bereaved family is to be permitted to remain in the service quarters for three months in addition to the month of decease. In case the deceased leaves no family the persons to whom his estate reverts are accorded a term of thirty days after the day of death for vacating the service quarters, and laboratories and session rooms, as well as other localities for official use are to be vacated in every case without delay.

With reference to the service quarters of professors in university buildings, which frequently in the interest of instruction must be vacated before expiration of the term generally granted to the bereaved family, § 9, subparagraph 1, of the law of June 18, 1890, contains the special provision that such quarters must be vacated by the family within one month from the day of notice, and, only when such notice has not been given, at the latest with the expiration of the general term of § 9, subparagraph 1, R. B. G.

If it has become necessary to vacate free service quarters before the expiration of the term the relicts entitled to the quarter of grace or to whom it has been granted (see above) must be accorded fair indemnity. Section 9, subparagraph 2 of the law of June 18, 1890, provides, therefore, that in such a case the relicts shall receive as indemnity the proportionate part of the regular statutory rent which the deceased would have had to pay for other than free service quarters.

There is no provision of indemnity for vacating other than free service quarters before expiration of the term. As a matter of course, the relicts have to pay the regular rent only for the time of occupancy.

At the present time three professors of the faculty of mathematics and natural sciences occupy free service quarters in the university building; one professor of the same faculty occupies service quarters at the regular statutory rent (at Strassburg 10 per cent of the entire statutory service income of the official in accordance with regulations of the imperial chancellor of May 25, 1874, concerning the use and maintenance of service quarters in Elsass-Lothringen). (Collection of Judicial Administration, Vol. II, No. 335, p. 288.)

(h) Concerning the claims of emerited professors and the relicts of professors, compare below, page 181, ff.

(bb) *Per diems, transportation, expenses of removal.*

Under § 18 of the R. B. G. the amounts of per diem and transportation expenses of officials in official business at a distance from their residence, as also the amounts of indemnification for removal expenses in case of transfers, are regulated by a rescript of the Emperor; the cooperation of the Bundesrath (federal council) is repealed by § 8 of the constitutional law (*Verfassungsgesetz*) of July 4, 1879. The imperial order of October 25, 1880, modified by the order of May 26, 1890, concerning per diems, transportation expenses, and expenses of removal for officials and teachers (*Gesetzbl.*, p. 136) does not, however, apply to professors, inasmuch as it was promulgated on the basis of the imperial law for officials (R. B. G.) and before the extension of this law upon legal relations of professors. The order of the governor of June 30, 1890 (*Gesetzbl.*, p. 189), issued for the execution of the above order, therefore also fails to mention the professors. These are still subject at present to the law of February 3, 1872, concerning the granting of per diem and transportation expenses for official journeys of civil officials of Elsass-Lothringen (*Gesetzbl.*, p. 124). Under this (§ 1) the regular members of provincial, central, and circuit authorities (boards), and the officials to be ranked with them, receive per diem expenses at the rate of 4 thaler = 12 marks, of which one-fourth is to be deducted if the return trip takes place on the same day with the outward trip. For transportation expenses the same officials receive under § 2:

For official journeys that can be made by railroad or steamboat, 1½ silver groschen = 12.50 pfennigs^a per kilometer and 1 thaler = 3 marks for each trip in and out.

For other official journeys, 7 silver groschen = 70 pfennigs per kilometer on the nearest practicable road connection.

Under § 4 the imperial chancellor provides what officials are to be ranked with the officials designated above, and according to the order of the chancellor of February 7, 1872, under § 2, No. 8, professors of the university, among others, receive the per diem allowance of 4 thaler.

^aOther officials receive now 13 pfennigs.

As to the expenses of removal, the orders of October 25, 1880, and of May 26, 1890, apply in the event of the transfer as professor to the university of an official not heretofore connected with the university.

The transfer of a professor within the limits of the province is impossible. Should persons, not heretofore in the provincial service of Elsass-Lothringen, be received in such service as professors, § 18 of the order of October 25, 1880, will, as per custom, be applied to them, under which such persons may be granted for the journey to the new place of service an indemnity fixed by the ministry, and in case of permanent acceptance an indemnity for the expenses of removal to be similarly fixed. These indemnities may not exceed the amounts dependent on the position to which the official has been called. Accordingly ordinary professors will be granted the respective higher amounts of expenses for removal and per diem (560 and 12 marks); extraordinary professors the lower amounts (300 and 8 marks).

(cc) The establishment of proprietary claims.

§ 149, R. B. G., opens to professors the right of appeal with regard to such claims, particularly to those referring to service payments, as well as to those referring to allowances made to relicts. According to § 150 the decision of the highest authority, i. e., of the governor, must precede the appeal, and the latter must be made, on penalty of loss of the right of appeal, within six months after communication of the decision to the party concerned. The province will be represented under § 151 by "the higher imperial authority," the secretary of state (under the order of August 3, 1890). Three resorts are open; the third resort is the imperial court (Reichsgericht: R. B. G., § 152, and G. V. G., § 135).

(dd) Title, rank, and uniform.

Are to be designated in R. B. G., § 17, by imperial rescript. Such has not as yet been promulgated. Special titles, in addition to the official title, are not as yet conferred on professors. There is no rank regulation whatever for Elsass-Lothringen. Only in practice the analogies of the Prussian regulations are observed, under which the rector holds rank with councilors of the second class, an ordinary professor with councilors of the fourth class, and an extraordinary professor with councilors of the fifth class. A gala uniform is not provided for professors, nor the official costume (the gown) customary elsewhere.

The sequence (rank) of the professors among themselves is determined in accordance with tradition by the time of their appointment as ordinary, respectively extraordinary, professor in the faculty of the University of Strassburg, together with the simultaneous appointment, after the time of appointment, to the respective position, eventually by age. Compare § 4 of the university statutes, § 2 of the law concerning the Thomas institutions of November 29, 1873, and § 4 of the statutes of the philosophical faculty.

G. TERMINATION OF THE OFFICIAL RELATIONS OF PROFESSORS.

This takes place under the general law for officials on dismissal upon motion after conviction of certain charges and on discharge by disciplinary process (R. B. G., § 75, No. 2).

Retirement is not mentioned in any form in the statutes of the University, and (see II above) formally excluded by § 2 of the law of June 18, 1890. Its place is taken by the emeriting procedure regulated in §§ 44 and 45 of the statutes.

(a) History of the respective provisions: The provisional statutes lacked provisions concerning procedures of emeriting. There was but one provision (§ 42) under which a docent, to whom the direction of a scientific institute or a clinical hospital had been intrusted, could be deprived of such direction by the imperial chancellor if he had become incapable for this by mental or bodily disease or weakness. If this suggested the inference that in the supposed case the absolute dismissal from the academic professorship is not admissible an express recognition of this proposition is nevertheless lacking, as also in general the regulation of the relation of the professors to the principles of the legal status of officials of the province, in so far as this (relation) could be inferred from the provisions of the French legislation—the law for imperial officials—R. B. G.—did not apply to professors. Under this (French) legislation the appointment of an official is considered fundamentally revocable, and there exists for the official under certain suppositions a claim upon pension which is

offset by the liability to deductions from salaries for the benefit of the pension fund (law of June 9, 1853).

In considering the definitive status the faculty (plenum), respectively the senate, acted upon the idea that § 42 of the provisional statutes by implication wholly excluded service pensions for professors, and therefore, as in Prussia, guaranteed to the latter the enjoyment of their full rights for life. It seemed, however, desirable, as was stated, that the exclusion of service pensions should be formally expressed as a guaranty that a professor could not at any time be retired unheard from activity. On the other hand, it appeared desirable, in deviation from the Prussian legal provisions, to render it possible for a professor to obtain retirement as emeritus with the mere loss of salary increments on reaching a certain age or in case of sickness. This, it was claimed, was not only equitable, but agreed also with the interests of the university to acquire vigorous teachers in place of those that may have become insufficient. On the other hand, it did not appear desirable to make retirement by emeritation obligatory, because thereby the university would lose those exceptionally efficient men who preserve their mental vigor and teaching ability to an advanced age. Moreover, it was not to be apprehended that an academic teacher who may have lost his efficiency would ever refuse emeritation, inasmuch as he must recognize in an eventual request the implication that he is no longer considered sufficient for his position. Consequently the faculty (plenum) proposed the adoption of provisions concerning emeritation essentially in the form of §§ 44 and 45 of the definitive statutes, with the exception, of course, of the introduction omitted therein: "Professors can not be (service) pensioned, but only emerited."

It is in agreement with these provisions that § 2 of the law of June 18, 1890, formally excludes the application to professors of the provisions of the law for imperial officials concerning service pensions. As the reasons emphasize, the application of the general provisions for service pensions, because of differences in the regulation of salaries (the absence of fixed salary classes and regular increase) did not appear to be feasible, and an equalization impossible without serious encroachments upon traditional academic and statutory relations. A necessity in the interest of the service for immediate dismissal, as it exists with other officials, does not occur with professors, whose representation may be accomplished in different fashion, more particularly as the appointment of directors of the institution is at all times revocable (§§ 82 and 94, No. 2, of the statutes). Consequently, and inasmuch as no embarrassments have resulted heretofore, the obligatory permanent emeritation analogous with the obligatory pensioning seems dispensable, and just as little can a temporary emeritation analogous to temporary retirement enter into consideration.

(b) Accordingly, subparagraph 1 of § 44 of the university statutes establishes the principle of the entire voluntariness of emeritation, which, it is true, as the preamble expresses it, "recognizes to a large extent the freedom of science and the interests of its representatives."

On the other hand, a professor can not demand his emeritation arbitrarily, but only under certain conditions, of which § 44, subparagraph 2, names the following:

The completion of the sixty-fifth year of life as the time limit at which, as a rule, one can no longer rely on the vigor requisite for teaching. (Compare the analogous privilege to service pension on the part of an official in the same age, according to Art. I of the law of April 21, 1886, R. G. B., p. 80.)

Also the case in which the government would relieve a professor against his will of the direction of a university institution or clinical hospital, by which in many instances the possibility of teaching on his part would be removed at the same time.

The statutes do not expressly identify with the first case the case in which a professor becomes incapable of teaching before completion of the sixty-fifth year of life through sickness or loss of his bodily and mental powers; and also does not provide for the proceedings by which eventually this inability would have to be established.

As a matter of course, the government is not prevented in the supposed case from granting emeritation to the professor, although he may have no formal claim. Actually this has been done repeatedly.

(c) The legal status of an emerited professor is defined in § 45, so that he is freed from the duty of giving lecture courses and from the acceptance of university offices, but continues in the enjoyment of his rights, with the exception

of the claim upon deanship (§ 4) and upon the increments in the compensation by the state.

The emerited professor is accordingly freed from certain duties of a professor and loses only certain of his rights. Emeritation, in contrast with pensioning, does not therefore mean the separation of the official from his legal status, but only a modification of the latter; fundamentally an emerited professor is in equal situation with an active professor.

Now, first, with regard to his duties, an emerited professor is no longer obliged to hold lecture courses (compare statutes of the university, § 72, subparagraph 4, and § 76), from which, according to § 81, it follows further that he can absent himself from the location of the university without leave. Furthermore, he is freed from the acceptance of university offices—rector, senator, syndicus (as a matter of course, inasmuch as he loses his claim upon deanship, also, from acceptance of this). In so far, however, as an emerited professor does not avail himself of these reliefs, announces lecture courses and holds them or accepts the call to a university office, he assumes thereby all the responsibilities connected with these functions. Necessarily an emerited professor who retains membership of his faculty and of the plenum is not relieved of the duties of taking part as ordinary professor in the functions of the faculty and as professor in the meetings of the plenum. If, however, as according to the above he is free to do, he removes his residence from Strassburg, these duties disappear with the actual disappearance of the possibility of their performance. Since, however, according to this, it depends on the choice of an emerited professor to relieve himself of the above duties and thereby of all the duties of a professor, and in consideration of the purpose of emeritation to grant the professor full leisure, he may certainly also be granted the right to relieve himself of all his remaining duties without change of residence in a formal declaration to the faculty. To this effect, therefore, the senate of March 3, 1880, passed a resolution which, at the same time, suggests to the faculties to bring about in each case of emeritation by a special request an immediate declaration on the part of the emeritus as to how he may intend to relate himself to the business of the faculty.

Among the rights of a professor, an emeritus expressly loses the claim to deanship because of his age (§ 4) and to the increments that form part of the compensation by the state. Moreover, if, and in so far as, he avails himself of his relief from lecture courses and from the acceptance of university offices or of his complete relief from all business, he loses also the rights connected with the duties in question. Thus, e. g., a professor who may have given the last-named declaration could no longer in the plenum assist in the election of the rector. Otherwise the emeritus continues in the enjoyment of all his rights. He has, particularly, the right to assist in the election of rector, senator, and syndicus, and, if he is an ordinary professor, also the right of eligibility to these offices. An emerited ordinary professor is a fully privileged member of the faculty whose meetings he attends (compare § 3 of the statutes of the philosophical faculty), and as senator fully privileged member of the senate, except that he can not become dean.

The question whether emerited professors are entitled to share in the promotion fees and qualification fees is determined by the provisions concerning the amount and use of fees in the regulations for promotion, respectively, for qualification (compare statutes of university, § 89, subparagraph 3, §§ 7, 26). Now, under dates of December 18, 1888, and February 2, 11, and 22, 1889, the medical, the theological, the philosophical faculties, as well as the faculty of jurisprudence and politics, adopted resolutions concerning the exclusion of emerited professors from promotion fees, in connection with amendments of the regulations of promotions, which subsequently were approved on April 29, 1889, by the imperial governor. Accordingly, § 6 of the Prom. Reg. of the philosophical faculty formally excludes emerited professors, while § 11 of the Prom. Reg. of the theological faculty, § 10 of the Prom. Reg. of the faculty of jurisprudence and politics, and § 10 of the Prom. Reg. of the medical faculty entitle the ordinary professors, who are under obligation to take part in the doctorate examinations, to receive the fees. According to this latter formulation, an emerited ordinarius would be entitled to a share in the fees only if he (see above) should expressly claim participation in the faculty labors connected with doctorate examinations. Otherwise he would receive remuneration without corresponding service.

Furthermore, the faculty of mathematics and natural science amended, in April, 1893, with governmental approval, § 12 of its statutes, under which the

income of the faculty not applied to its purposes was to be distributed among the ordinary professors, and ordered this distribution among the ordinary professors who may be under obligation to take part in the business of the faculty (§ 10 of the Prom. Reg.). With this agrees, finally, the new formulation of § 11 of the qualification regulations of the faculty of jurisprudence and politics.

(d) The analogous application of certain provisions of the imperial law for officials (§§ 57, 59, 60, 69), concerning service pensioners and their pension claims to the emerited professors and their salary claims, is ordered in § 5 of the law of June 18, 1890.

Accordingly the claim to salary of an emerited professor is suspended:

1. If he loses German citizenship, until its eventual restoration;
2. If, and as long as, he draws service income in the service of the Empire or of the state, in so far as the amount of such income, together with the salary of the emeritus, exceeds the amount of the service income of the professor before emeritation.

Similarly, if an emeritus has accepted a position in the public service which in itself is entitled to service pension and in this position has earned a service pension, he will continue to draw the emeritus salary only to the extent designated in No. 2 above.

The withdrawal, reduction, or restoration of the emeritus salary on the basis of the preceding regulations begins with the beginning of the month which follows the event entailing such change. In case of temporary reengagement in the service of the Empire or state on per diem or other remuneration, the emeritus salary is paid without reduction during the first six months of such occupation, but for and after the seventh month only to the amount admissible under the preceding provisions.

Even the so-called month of grace is granted to the relicts of the emerited professor as to those of the service-pensioned official. If an emerited professor leaves a widow and legitimate progeny the emeritus salary continues to be paid for the month following the month of decease. To whom payment shall be made is determined by the highest imperial authority, the secretary of state.

With the approval of the same authority, payment "of the month of grace" may be made also if the deceased leaves in destitution parents, brothers or sisters, nephews or nieces, or adopted children whose provider he was, or if his estate is not sufficient to cover the expenses of his sickness and burial.

The "month of grace" is not subject to attachment.

[Pp. 202 and 203.]

V. PAYMENTS TO BE MADE TO UNIVERSITY OFFICIALS.

The following salaries obtain:	Marks.
The secretary of the university, a salary of -----	3,300-4,900
At present-----	4,000
The questor and accountant (rendant) -----	4,900
(Besides from questor fees, 2 per cent of the paid current honoraria, and for the collection of respited honoraria, 5 per cent, and if these have to be recovered after the term of respite, 10 per cent, he has service residence under statutory rent; of his income from fees 1,000 marks are considered in computing his service pension.)	
The treasury assistant, at present-----	2,800
(He ranks with the secretary's assistant and the treasury assistant of the inner administration; the respective salary posts are mutually transferable.)	

The calculator and comptroller of the treasury draws as such no special remuneration.

The assistant officials of the institution receive: The prosector of the anatomical institute, 3,000 marks; the observator of the observatory, 3,900 marks; the assistants, varying amounts from 600 and 900 marks to 1,800 marks; besides, the assistants receive partially free service residence, even with furniture, or service residence at statutory rental. The subassistants, amanuenses, etc., receive very modest remunerations. The extraordinary professors, who serve also as assistants, receive no pay for these positions.

Of the subordinate officials, the clerk of the rector receives at present 2,300 marks; the bedels, including the head bedel and the superintendent of the household (*Hausmeister*), 1,400-1,900 marks; the head bedel besides, a func-

tional increment of 300 marks; the janitor, a remuneration of 1,150 marks; the steward of women's clinical hospital, 1,900 marks; the university gardener, 2,000 marks.

The compensations of the servants and janitors of the institution consist in general of salaries of 1,275 to 1,525 marks, averaging 1,400 marks, which are mutually transferable. Most of them have service residence at statutory rentals. The servants of the Institute of Physics and Chemistry draw special salaries of 1,800 marks each, of which, however, certain amounts do not enter into computation of service pensions.

III. THE ROYAL BAVARIAN UNIVERSITIES.

A.—PROVISIONS FOR THE WIDOWS AND ORPHANS OF PROFESSORS, ETC.

The pensioning of the widows and orphans of the teachers and officials at the royal Bavarian universities is primarily like that of all other regularly employed public servants of the Kingdom of Bavaria under § 8 of the ninth appendix of the constitutional charter of May 26, 1818, regulated by the service decree of January 1, 1805.^a

According to this every widow of a public official and also the widow of a university professor receives, after lapse of the month of decease with which the salary of the deceased husband ceases, one-fifth of the activity or retirement salary of the latter as a widow's pension, derived proportionately from the same sources with the salary or periodical service-increments.

Each "simple" orphan (orphan having lost its father) shall receive one-fifth, "double" orphan (full orphan) three tenths, of the widow's pension as alimony.

This alimony ceases as a rule with entrance into the twenty-first year of life or previous change of condition, by which the orphan is otherwise provided for (*Versorgung*).

Children that have reached majority at the death of the father but are not as yet provided for receive for one year the amount of alimony which is computed for minors, as a final gift.

From the rule extinguishing the orphan's alimony with the beginning of the twenty-first year of life those children are excepted who are legally shown to have lost temporarily or permanently the ability of caring for themselves.

A threefold gradation is considered in this:

- (a) Limited ability to make a living in the service of others or by work at home, which renders additional support apparently indispensable;
- (b) Total inability to make a living;
- (c) The still worse condition of chronic disease, total blindness, constant confinement to the bed, or other crippled condition which, in addition to total inability to make a living, demands the help and care of others.

In accordance with these gradations there is granted even after entrance upon the twenty-first year of life in the first case one-half, in the second the whole of the statutory alimony, and in the third case this whole and an increment of its half, which increment in these extraordinary cases is extended also to widows' pensions, however, only in cases of established real destitution and no participation in a public charitable or provident institution.

As yearly contribution to the respective widows and orphans' fund, every regularly employed public official is held to pay a certain percentage of his service or retirement salary, which (percentage), with a salary of 1,080 to 3,600 marks and with higher salaries, rises up to 3 per cent.

In addition to this claim to pension, respectively alimony, there had been expressed already in Article XXIV, § 24, of the decree concerning public officials, that these officials ought to establish by their private means a special widows and orphans' fund.

^a Compare for this in general: J. Rüb, Der pragmatische Kgl. bayerische Civil-Staatsdiener, seine Ständes- und Besoldungsverhältnisse, ferner die Berechnung der Pension für ihn nebst Wittwen u. Waisen, sowie die Bezüge aus Relikten-Unterstützungsvereinen und Töchterkassen. Published by the author. Press of I. M. Richter, Würzburg.

After various initial attempts since 1818 such a special fund was finally established in 1865 under the name of "Benefit Association of the Regular Public Officials."^a

The members of this benefit association are grouped into three classes, as follows:

Those that draw salaries of 4,320 marks and over, first class;

Those that draw salaries of 2,160 to 4,319 marks, second class; and

Those that draw salaries of less than 2,160 marks, third class.

The first class has to pay an annual premium of 61 marks 20 pfennigs, the second class 40 marks 80 pfennigs, the third class 20 marks 40 pfennigs.

For this the widow of an official of the first class receives an annual pension of 540 marks, of the second class 360 marks, of the third class 180 marks.

The "simple" orphan (half-orphan) receives up to the completed twentieth year of life, or until provided for at an earlier period, one-fifth, the "full" orphan three-tenths, of the pension due to the mother.

There is no obligation for university professors to join the benefit association; on the other hand, the civil officials of the university are under obligation to join the association on the day of their appointment. With this benefit association a so-called "daughters' fund" (*Töchter Kasse*) is connected. From this the unmarried daughters of members receive after the death of their parents annual benefits (*Präbenden*) eventually for life, however, not before the beginning of the twenty-first year of life, and until marriage or the taking of perpetual vows in a convent. These benefits amount annually to 240 marks. The annual fee for each regular member of the daughters' fund is fixed at 20 marks 40 pfennigs.

There is no obligation to join the fund either for university professors or for the civil officials of the university.

The following revised statutes, approved by the government under date of September 13, 1889, were adopted by the eleventh general assembly of June 25, 1889:

Revised statutes of the general benefit association for the relicts of royal Bavarian public officials and of the daughters' fund connected therewith.^b

SECTION I.—GENERAL BENEFIT ASSOCIATION.

§ 1. The object of the association shall be to provide benefits for the relicts of its members, without prejudice to any claims they might have to pensions or alimony from the public funds.

§ 2. The general benefit association draws its members from the public officials employed in the royal civil service with statutory rights in accordance with the ninth appendix of the constitutional charter, to the exclusion of those who already belong to an association established for the benefit of the relicts of public officials under the supervision of the state and enjoying contributions from the public funds.

The following may become honorary members at any time: Public officials of all grades who, under the government order of April 6, 1888, concerning the general benefit association, etc., and the daughters' fund connected therewith, are not under obligation to become regular members, if—without raising any claims to the funds of the association for their relicts—they intend to assist in its object and prove this intention—

(a) By pledging themselves to pay during their continuance in the service the contribution fee of a regular member corresponding with their salary; or

(b) By paying into the fund of the association on application for honorary membership an aggregate sum amounting to at least ten annual contribution fees of regular members of their salary class.

Increase of the contribution fees under § 13, subparagraph 2, or supplementary contribution fees, shall not apply to honorary members.

^a Compare Bayerisches Staatsrecht, von Max Seydel, 1887, Vol. III, p. 462 ff.

^b Compare in this connection the chamber decree of July 10, 1865 (G. Bl., p. 110), concerning the establishment of a benefit association for the relicts of royal Bavarian civil officials; the royal government decree of August 31, 1865, concerning the same association and the daughters' fund connected therewith; the royal government decree of April 6, 1888, concerning the same object, and the announcement of the royal ministry of finance of April 24, 1888, connected therewith, all printed in the "Revised Statutes of the general benefit association, etc., Munich, 1889: Academic Press of Fr. Straub."

§ 3. The association shall be under the supervision of the government.

§ 4. The association shall have the rights of a corporation.

§ 5. The state officials named in § 2, subparagraph 1, appointed on or after April 6, 1888, not belonging to the Catholic clergy, shall become regular members of the association with their appointment.

The university professors appointed on or after April 6, 1888, and who do not belong to a separate association established for the benefit of the relicts of state officials, enjoying contributions from the state and placed under state supervision, shall become members if within six months from the day of their appointment they pledge themselves to pay four widows and orphans' fees for the benefit of the benefit association in accordance with the provisions made in behalf of the regular state officials. This term of respite shall begin for university professors appointed on or after April 6, 1888, up to the day these revised statutes take effect with the last-named day.

The examination of membership claims, their recognition by the issue of the certificate of membership, and, eventually, their rejection on the ground of these statutes, shall belong to the council of administration.

The determination of the statutory contributions shall be made in accordance with government provisions existing at the time.

§ 6. For the state officials designated in § 2, subparagraph 1, who may have been appointed before April 6, 1888, the following provisions shall apply:

They shall be entitled to regular membership in the association if on the day of application for membership they are still in active service and have not passed the fiftieth year of life.

They shall pay supplementally the respective contributions from October 1, 1865, respectively, from the day of their later appointment to the day of their application for membership, and suffer an additional charge of 10 per cent annually of this supplemental payment for the entire period to which the supplemental period applies.

The application for membership shall be made against immediate certificate of receipt, as follows:

By members of the royal council of state to the royal state ministry of the interior;

By an official belonging directly to one of the royal civil state ministries, the same;

By directors of the central and centralized offices and of the circuit offices, to the respective royal state ministry;

By other officials to their boards of directors, respectively, to the boards of directors of their superior offices.

The respective offices and boards of directors shall transmit the applications for membership to the council of administration of the association and shall make report to the offices in control of the respective funds, stating the amounts of contributions due, for the purpose of their collection at the proper time.

The examination of membership claims, etc., see § 5, subparagraph 3, p. 135.

The rights and duties of membership shall obtain with the date of application for membership, subject, however, to the recognition of the right of membership by the council of administration.

If a member dies before complete discharge of these obligations, his relicts shall not actually draw their statutory claims until by their retention, or in other ways, the arrears shall have been fully covered.

The provision of the preceding subparagraph shall apply without regard to the time of the acquisition of membership.

§ 7. Every regular member is under obligation to belong to the association as long as he is in the enjoyment of a salary or service pension from the Bavarian state treasury.

§ 8. The obligation of a regular member shall consist in the payment of a fixed annual contribution, which, beginning with the time of the acquisition of membership, shall be collected, as a rule, through deduction from the salary or service pension.

Members whose contributions can not be raised through such deductions shall be excluded from membership if they should be in arrear with their contributions for more than six months and if the request for payment by the administrative council should have remained ineffective.

§ 9. No restitution of paid contributions shall be made.

§ 10. Subject to the provisions of subparagraph 2, a member of the association shall continue as such, even after voluntary or involuntary separation from the

service of the state, if the member obligates himself to continue payment of the annual contribution of the class to which he belonged heretofore, and, should he later on fail to pay contributions due to the benefit association, to pay in addition an annual increase of contribution equal in amount to the contributions last paid.

A member who, in consequence of criminal or disciplinary judgment, shall lose temporarily or permanently his office or rights of citizenship or the right to occupy public office, shall cease to be a member of the association with the day the respective judgment shall take effect.

The right of membership may, however, be retained under assumption of the obligations of subparagraph 1, when, in the disciplinary dismissal of a judiciary official under article 5, § 5, of the disciplinary law for judiciary officials of March 26, 1881, the reliefs of the same shall have been left wholly or in part in the enjoyment of their pension claims.

The reliefs of a former member that has lost membership under subparagraph 2 shall have no legal claim to benefits. The right, however, is reserved to the administrative council to grant, in case of destitution, moderate benefits in proportion to the paid-up contributions.

§ 11. The fund of the association shall be derived—

- (a) From the contributions due from regular members and from the annual contributions of honorary members;
- (b) From the supplementary contributions of regular members;
- (c) From the endowment fund assigned to the association under the governmental chamber decree of July 10, 1865, § 10, letter *a*, No. 1, and which eventually is to revert to the state;
- (d) From annual contributions by the State;
- (e) From the aggregate payments of honorary members and from other gifts, inheritances, legacies, etc.

For reinforcement of the fundamental assets and its permanent security the incomes designated under letter (b) and under letter (e), in so far as the donors or testators have not expressly made different provision, shall be added to these (assets). Similarly, there shall be added to these (assets) all amounts and all surplus of the income designated under (d), as well as of interest on the assets, which under the provisions of § 17 appear to be excluded from application to current benefits.

§ 12. The regular members of the association are grouped in three classes.

Beginning with January 1, 1876, the state officials that draw an annual salary—

- (a) Of 4,320 marks and over shall belong to the first class;
- (b) Of 2,160 to 4,319 marks shall belong exclusively to the second class;
- (c) Of less than 2,160 marks shall belong to the third class.

Portions of salary that are designated in amounts of grain, and that are, however, statutory, shall be computed with the fixed salary under the valuation given in the decree or in the nominative law.

Retirement shall not affect the preceding provisions.

§ 13. Beginning with January 1, 1876, the contributions due by regular members shall, as a rule, be as follows:

- First class, annually, 61 marks 20 pfennigs;
- Second class, annually, 40 marks 80 pfennigs;
- Third class, annually, 20 marks 40 pfennigs.

The amount of these contributions shall be increased by 25 per cent in all the three classes for a regular member who—

- (a) On the day of the acquisition of membership shall have passed the fiftieth year of life, and who at the same time is married or widower, with one or several children that have not as yet completed the twentieth year of life; or
- (b) Who, after completing the fiftieth year, marries or remarries a woman more than 10 years younger, in so far as he is not already under obligation to pay the increased contribution according to regulations under (a).

§ 14. From the resources of the association benefits shall accrue without regard to other property or income on their part—

1. To the widows during their widowhood;
2. To the legitimate children or children legitimized by subsequent marriage, in case of their orphanage, up to the completed twentieth year of life or until they may be provided for at an earlier period.

The wife of a member of the association adjudged as the guilty party in divorce shall, in case of the decease of the member, have no claim upon benefit or compensation.

The claim to pension becomes extinct for widows entitled to benefits on their remarriage. They shall, however, in such cases, on notice, receive a compensation to be determined by the administrative council, which, however, shall be estimated at not less than the fivefold nor more than the tenfold amount of the annual benefit.

If the deceased member of the association leaves, in addition to the wife married to him later on, also a divorced wife, the claim from the benefit association is due to the widow to whom the claim upon the pension from the state fund shall have been adjudged.

If under subparagraph 3 neither of the widows draws a pension from the Bavarian state fund, the benefit, respectively, the compensation shall be due to the divorced wife, provided she was not divorced as the guilty party and her former husband during his marriage with her was already a member of the association.

§ 16. The distribution of the benefits for widows and orphans shall be made in per capita shares.

The determination of the per capita share of a widow—the unit in the normal amount of benefits—shall be made in accordance with the following:

- (a) For a widow of a member of the first class, 3 shares; for one of the second class, 2 shares; for one of the third class, 1 share.
- (b) For five half-orphans of the first class, 3 shares; for five half-orphans of the second class, 2 shares; for five half-orphans of the third class, 1 share.
- (c) For 10 full orphans of the first class, 9 shares; for 10 full orphans of the second class, 6 shares; for 10 full orphans of the third class, 3 shares.

By the sum of the shares thus obtained the amount of the resources at disposal for distribution shall be divided.

§ 17. Beginning with January 1, the amount of such a share shall be fixed provisionally at 180 marks annually. An increase of this amount can be made only in the manner prescribed in § 35 of the statutes for all amendments of the statutes.

For application to current benefits the income from the annual contributions of the members shall be drawn upon first, then the interest from invested funds, and in the third place the contributions by the state mentioned in § 11, letter d.

§ 18. The widows of members of the association shall receive as annual benefit: For the first class, 3 shares; for the second class, 2 shares; for the third class, 1 share.

§ 19. Of the surviving children, a half-orphan shall receive one-fifth, a full orphan three-tenths, of the amount of benefit of the mother, until completion of the twentieth year of life, or until he or she shall be provided for earlier.

§ 20. The alimony of the children shall remain, even if the widow marries again and the former thereby obtain a new home.

§ 21. Adopted children or children acquired on marriage can not obtain benefits unless they are entitled thereto on the account of their own father.

§ 22. The children of a deceased member of the association that have a step-mother shall be treated as half-orphans.

§ 23. Benefits shall be due with the lapse of the month for which the salary of the deceased husband or father was still paid, and for those entitled to claims whose husband or father did not enjoy a salary, with the first day of the calendar month following the day on which the husband or father died. They become extinct with the lapse of the month in which the claim ceases.

SECTION II.—DAUGHTERS' FUND.

In addition to and in connection with the General Benefit Association for the relicts, etc., there exists a distinct daughters' fund.

From this the unmarried daughters of the members receive annual benefits after the death of both their own parents, not, however, before the beginning of the twenty-first year of life, until their marriage or the taking of perpetual vows in a convent eventually for life.

§ 25. The provisions of § 2, subparagraphs 2 and 3, and §§ 3 to 9, above, apply also to the distinct association for the daughters' fund.

§ 26. The members of the General Benefit Association appointed to office up to April 6, 1888, are entitled to become regular members of the daughters' fund for the first three years from the day of their appointment.

With regard to their admission and rights the provisions of § 6, subparagraphs 4, etc., shall apply.

They shall pay the respective contributions in arrear from the day of their appointment to the day of their entrance request and, besides, a supplementary arrearage according to the standard in the third subparagraph of § 6.

§ 27. Subject to the provisions of subparagraph 2, any member of the association retains membership, even on voluntary or involuntary separation from the public service, in so far as he assumes the obligation to continue payment of the statutory annual contributions and retains at the same time his membership in the General Benefit Association.

Subparagraphs 2 and 3 of this section, as above, page 176, subparagraphs 2 and 3 of § 10.

The relicts, designated in § 24, subparagraph 2, of a former member, etc. (remainder as above, page 139, subparagraph 4 of § 10).

§ 28. The resources of the daughters' fund shall be derived:

- (a) From the contributions due from regular members and from the contributions of honorary members;
- (b) From the payment of supplementary contributions of the regular members;
- (c) From the annual contributions by the state; and
- (d) From aggregate payments of honorary members and from other gifts, inheritances, legacies, etc.

For the sake of reenforcing the fundamental capital, the permanent securing of which is to be held in view, the revenues designated under letters (b) and (d) are to be primarily added to the capital, with reference to those under (d), in so far as the donor or testator has not otherwise provided.

Similarly there shall be added to the fundamental capital all amounts and surplus sums from the revenues designated under (a) and (c), as well as from interest on the capital, which, under the provisions of § 30, are excluded from application to current prebends.

§ 29. The annual contribution of a regular member shall be 20 marks 40 pfennigs from January 1, 1876.

§ 30. The annual prebends shall be computed hereafter on the basis of the portion of the annual income designated for distribution in equal per capita shares. Provisionally an annual prebend has been fixed at 240 marks, beginning with January 1, 1881. An increase in this amount can be secured only in the way prescribed for all amendments of the statutes in § 35.

Prebendaries who may marry or who take perpetual vows in a convent shall receive on notice a compensation to be determined by the administrative council, which shall be not less than the fivefold nor more than the tenfold amount of the annual prebend.

To the current prebends there are to be applied, first, the revenues from the annual contributions of members, then the interest from the capital, and, in the third place, also, eventually, the contributions from the state, mentioned under § 28, letter (c).

SECTION III.—ADMINISTRATION.

§ 31. At the head of the two associations stands an administrative council, which shall have its seat at Munich.

It shall consist—

1. Of a president;
2. Of a vice-president, both of whom are selected by His Majesty the King from the higher state officials residing at Munich and who need not be members of the associations; and
3. Of 12 regular members residing at Munich who shall be elected by absolute majority of votes by the general assembly, and of whom at least six must also be regular members of the daughters' fund.

§ 32. By similar process 12 alternates shall be elected who shall officiate in the order of their election, but with regard to the requirement that at all times six members of the daughters' fund shall sit in the administrative council.

§ 33. The administrative council shall attend to the conduct and transactions of the affairs of the associations without pay.

It shall pass its resolutions in consultations, at which, in addition to the president or vice-president, there shall assist at least eight members of the administrative council, of whom at least four shall also be members of the daughters' fund. With resolutions that concern exclusively the daughters' fund, the decision shall belong only to the presiding officer and to those members of the administrative council who are also members of the daughters' fund.

If, through detention of members of the administrative council, the number requisite for the passage of resolutions is not available, the requisite number of alternates shall be invited to attend the consultations in the order of their election and with regard to the requirement that at least four members of the daughters' fund shall sit in the administrative council.

In case of a tie vote the presiding officer shall decide. The vice-president, even when he has not been called to preside, is nevertheless authorized, but not obliged, to take part in the consultations and votes.

The administrative council shall administer the property of both associations and shall care for its maintenance and increase. It shall be its duty to invest at interest all available means at all times without delay.

It is therefore authorized to invest capital funds and to recall invested capital funds, to issue receipts therefor, to execute and to transfer securities and perpetual loans, to institute foreclosure proceedings against securities and mortgages, to represent the association in all juridical matters subject to § 43, and to empower permanent or special representatives for the transaction of affairs of the association.

It is authorized to defray the expenses of its administration from the funds of the associations and to order their payment and entry by the royal central state depository.

The administrative council shall publish annually the results of the regularly balanced account and shall submit the same at the time for inspection and action to the general assembly.

The administrative council is authorized eventually to order the exclusion of members of the associations from the associations in accordance with the statutory provisions.

§ 34. The general assemblies shall be held biennially at Munich.

Every member of the associations is entitled to take part in them.

The call shall be made by the administrative council, which is authorized also to convene special general assemblies.

The president of the administrative council shall preside.

Resolutions shall be passed by absolute majority of the votes of those present, provided, however, that in matters concerning exclusively the daughters' fund only the members of this branch of the associations shall be entitled to vote.

§ 35. The following matters are subject to the general assembly:

1. The election of the administrative council, with the exception of the two presidents;
2. The inspection of the financial reports and action concerning them;
3. Deliberation and action concerning amendments of the statutes, subject to the approval of His Majesty the King;
4. Deliberation and action concerning other matters which the administrative council may submit to the general assembly; and
5. Deliberation and action concerning the dissolution of the associations and disposal of the property, subject to the approval of His Majesty the King.

§ 36. The contributions of the members of the associations shall be collected by the depositories and bureaus that are held to pay the salaries and service pensions of the members of the associations, upon report of the offices which control the funds, in monthly rates, by deductions from salaries or service pensions, and shall be remitted at the close of each quarter to the depository of the respective circuit, district, or center, together with a list of eventual arrears.

These depositories shall remit, also quarterly, to the royal central depository of state (*k. Central Staats Kasse*) the amounts delivered to them, together with eventual other receipts, and shall report at the same time eventual arrears, which arrears the royal central depository of state shall at once report to the administrative council.

In case of transfer or change of residence on the part of members of the associations the depositories and bureaus which hitherto had charge of the collection of the contributions of the associations shall report the change to the

respective depositories and bureaus which will hereafter have to pay the salaries and service pensions.

§ 37. The offices, which are authorized to regulate and assign statutory pensions and alimonies, shall also issue the orders for the payment by respective depositories and bureaus of the alimonies determined by the statutes or by the administrative council.

The bureaus that make payments shall transmit quarterly to the respective circuit, district, or central depository a list of the collected contributions and of eventual other income, and of the alimonies (and pensions) paid out with the respective receipts, properly separating the two associations.

§ 38. The district and central depositories shall keep separate books of the receipts and expenditures of the two associations and shall make, separately for the two associations, financial reports which—the latter under the provisions of the royal decree of January 11, 1826, "concerning financial accounts"—shall be submitted to the royal central depository of state (*k. Central Staats Kasse*) for revision and super-revision and their closing.

§ 39. The royal central depository of state (*k. Central Staats Kasse*) shall collect the respective contributions of the associations from the salaries and service pensions directly payable by it, shall pay the pensions and alimonies assigned to it, and shall make report thereon, including eventual surplus deliveries made to it and other receipts, which (report) shall also be subject to revision and super-revision.

§ 40. At the close of each fiscal year the depositories designated in §§ 38 and 39 shall prepare a list of the then members of the two associations and of the contributions due from them, also of the widows and orphans and of the benefits accorded to them, and shall submit this to the royal ministry of finance, which shall communicate the same to the other royal ministries, as well as to the administrative council.

§ 41. The royal supreme court of accounts (*k. oberste Rechnungshof*) shall, under § 58 of the royal decree of January 11, 1826, prepare a general account, and submit the same, together with a statement of assets—separately for both associations—to the royal ministry of finance, which shall transmit these to the administrative council of the associations.

§ 42. The entire property of the associations in cash and bonds shall be deposited with the central state depository.

§ 43. Differences between members of the associations or their relicts, on the one hand, and the two associations, on the other, concerning claims resulting from connection with the associations, shall be adjudged by a court of arbitration under the tenth book of the *Reichs Civil Processordnung* (Regulation of Civil Suits of the Realm).

This (court of arbitration) shall consist of two trustees to be selected by the administrative council, two to be selected by the interested member of the association or his relicts, and one foreman, to be selected by these four.

In case the four trustees fail to agree on the election of a foreman within a peremptory time to be determined by the administrative council, the first president of the administrative council shall also be foreman of the court of arbitration.

In complaints in the sense of § 871 of the *Reichs Civil Processordnung* (see above) the royal *Landgericht* (provincial court) of Munich I or the royal *Amtsgericht* (magistrate's court) of Munich I shall have jurisdiction.

PRIVATE WIDOWS' FUND, UNIVERSITY OF ERLANGEN.

For the ordinary professors of the University of Erlangen there exists, finally, also a so-called private university widows' fund, in addition to and wholly independent of the public institution of pensions granted from the resources of the state.

Obligation of membership does not exist.

Each member has to pay a special entrance fee (*Accessgelder*), consisting of 5 per cent of the total cash salary. The same has to be paid with each increase of salary.

An ordinary professor with the initial salary of 4,500 marks, therefore, has to pay 228 marks of entrance fee (*Accessgelder*).

In addition to this each member has to pay an annual fee of 18 marks.

The widow draws her pension until her death or remarriage. In both cases the pension is transferred without reduction to the legitimate children of the deceased husband, and payment is continued without reduction until the youngest child is sufficiently provided for or has passed the twenty-fifth year of life.

The amount of the yearly pension is determined by the number of existing widows and orphans and by the amount of interest in such a way that the yearly amount of interest from investments of the fund are equally and mutually divided among the surviving families after a few slight reductions.

The yearly pension of a family is not to be less than 450 marks nor more than 900 marks; at present it is on an average 700 marks.

Extraordinary professors, the syndicus, the questor, and the secretary of the university may be admitted on ballot as extraordinary members. These have the same duties with ordinary members, but their families receive eventually only one-half of the above pension. So far, however, none of the above officials of the university have succeeded in securing membership in the private university widows' fund.

The statutes of October 30, 1860, approved under date of January 5, 1861, are as follows:

Revised statutes of the private widows' fund of the Royal Frederick-Alexander University of Erlangen.

I. GENERAL PROVISIONS.

§ 1. The private widows' fund of the university is an institution for the benefit of the ordinary professors of the Frederick-Alexander University and exists with the character of a private institution, in addition to and wholly independent of the public institution of pensions paid from the resources of the state, respectively, from the questorate fund, under the provisions of the regulations of the Bavarian public service.

Upon motion of the royal and academic senate and of the administration of the private widows' fund, the ministerial decree of August 17, 1860, No. 6977, approves the proposition that the annual appropriations of the private widows' fund be submitted for approval to the royal ministry of the interior for church and school affairs and the annual account to the royal chamber of accounts for revision, without prejudice, however, to the character of the fund as a private institution.

§ 2. The private widows' fund shall enjoy the rights and privileges of benevolent institutions (*piorum corporum*).

§ 3. Formerly the private widows' fund consisted of two separate funds, viz:

- (a) The so-called professors' widows' fund, which was established from contributions of the professors since the year 1747; and
- (b) The so-called widows' fund instituted by Prussia, established with a donation of His Majesty the King of Prussia on December 31, 1804.

Separate accounts were kept for the two.

By a ministerial decree of April 16, 1859, however, these two funds were combined as the "private widows' fund of the Royal University of Erlangen," and, as a consequence, the separate accounting was discontinued with the year 1859-60.

§ 4. The income of the private widows' fund shall consist—

- 1. Of the interest from invested capital;
- 2. Of the 300 florins^a payable to the private widows' fund annually from the exchequer of the university, under a ministerial decree of January 13, 1855;
- 3. Of the cash surplus of the prorectorate fund, which, under a ministerial decree of March 19, 1853, shall be transferred annually (in the month of January) to the private widows' fund and added to its fundamental assets;
- 4. Of the annual contribution of 6 florins (10 marks 80 pfennigs) which every member and every active ordinary professor, as well as every retired ordinary professor connected with the university and drawing his retirement salary from the university fund or any other fund, irrespective of membership in the widows' fund, is obliged to

^a Withdrawn by a ministerial decree of December 19, 1867.

- pay into the widows' fund, and which the questor is authorized to deduct or cause to be deducted from his pay; ^a
5. Of the entrance fees (*Accessgelder*) of the newly entered members and, respectively, of the arrearage interest thereon;
 6. In some secondary revenues, viz:
 - (a) From each inscription or immatriculation a voluntary amount, which is asked *ad pias causas*.^b
 - (b) From each, although otherwise gratuitous, promotion, 1 florin 30 kroner (2 marks 70 pfennigs).
 - (c) From every entombment in the university vault the conventional fees, viz:
 - A. For ordinary professors and their family members, (1) for adults, 5 florins; (2) for children under 12 years, 3 florins.
 - B. For others according to varying conditions, 20 to 50 florins.

The repairs of the university vault, under the resolution of the administrative council of August 29, 1859, is to be charged not to the private widows' fund, but to the exchequer of the university.

II. DUTIES AND RIGHTS OF MEMBERS.

§ 5. Every ordinary professor is immediately entitled to admission to the widows' fund; as actual member he will be considered, however, only with the day when he has paid his entrance fee. Should he die before payment of this fee his relicts shall have no claims upon the private widows' fund, and the payment of entrance fees after death by relicts is under no circumstances admissible.

§ 6. These entrance fees shall be computed at 5 per cent of the fixed salary, so that, however, 60 florins (180 marks) shall be the minimum of the fee. To the fixed salary there shall be added in the computation also the statutory functional receipts, in so far as they are not granted for the purpose of defraying official expenditures. The salary paid in grain (*Getreide-besoldung*), in so far as this shall be defrayed from the university fund, shall enter into the computation. Supplementary receipts, however, from other funds shall not be considered.

The phrase "other funds" shall include only those funds that are administered by other than university authorities.

Therefore 5 per cent shall be paid supplementally on every later increase in salary, if thereby a salary of 1,200 florins (2,160 marks) is not exceeded, as well as on functional receipts designated in detail above.

§ 7. The president of the administrative council of the widows' fund shall, as soon as feasible, submit to each newly appointed ordinary professor ^c the statutes for his inspection, stating the amount of the capital of the association and the pension rates of the last fiscal years.

The professor who may desire to avail himself of his right of admission shall state this in a written communication to the administration, which (latter) thereupon shall immediately remit to the cashier the requisite order for the collection of the entrance fee.^d (Resolution of the royal academic senate of July 20, 1872.)

The member that pays his entrance fee later than eight days after transmittal of this communication shall pay interest at 5 per cent on the entrance fee from the lapse of these eight days to the actual payment of the fee, for the benefit of the fundamental capital.^e

^a All ordinary professors appointed after June 13, 1869, both active and not active members of the private widows' fund, shall pay an annual contribution of 10 florins (13 marks). (Ministerial decree of June 13, 1869, No. 4926.)

^b Repealed on the basis of ministerial decision of October 4, 1891, No. 14173.

^c By a resolution of the administration of April 23, 1869, it was decreed that the statutes should be immediately sent for inspection also to those ordinary professors appointed only provisionally by ministerial decree.

^d If, on receipt of a communication declaring the desire to enter, a decree for entrance has been issued to the questorate, and if eight days after receipt of the decree the entrance fee has not been paid, the questorate shall report this to the administration. The decree shall then be withdrawn, and only upon request by the respective professor a new decree shall be issued to the questorate. (Resolution of the administration of June 23, 1870.)

^e In case of arrearage interest proceedings are as follows: First, the questorate receives a decree for the collection of the entrance fee and, at the same time, a request to compute at the proper time the arrearage interest up to the date of actual payment, and to submit this computation to the administration. When this has been done a new decree for collection of the entrance fee is issued to the questorate, with inclosure of the computation of the questor. (Resolution of the administration of July 1, 1870.)

§ 8. Separation from the widows' fund shall take place only when a member separates his connection with the Frederick-Alexander University either by emigration or transfer or dismissal from service. In all these cases, separation from the widows' fund is necessary.

Retirement as such, whether the retirement salary be paid from the questorate fund or from another fund, is not ground for separation as long as there is no return to active service or employment of the retired professor in a function not connected with the University of Erlangen.

§ 9. In case of separation from the fund the entrance fees (*Accessgelder*) shall be returned to the member separated, but without interest. Compensation for the paid annual fees can not be made.

§ 10. Outside of the ordinary professors no other member of the university is entitled to admission. However, the members of the private widows' fund shall have the right to admit also extraordinary professors that draw salaries from the exchequer of the university, the syndicus, questor, and secretary of the university, as a special favor and under free agreement. However in such a case it is provided:

- (a) The admission of new extraordinary members shall be decided by all the ordinary members, with the exception of the senators that have not joined the widows' fund, under the presidency and direction of the president of the administration, by secret ballot with black and white balls; but new extraordinary members shall not be admitted, nor even their admission proposed, until the yearly income of the widow of an ordinary member shall have reached a minimum of 300 florins (340 marks), for which reason the administrators shall submit a report concerning the status of the widows' fund whenever a vote is to be taken;
- (b) Two-thirds of the votes shall be requisite for admission;
- (c) The admitted member shall be considered only as an extraordinary member of the association and shall have no vote concerning the interests of the widows' fund; and
- (d) He shall, however, contribute in the same measure with the ordinary members, but his widow or other relicts can claim only one-half the annual pension due the widows (and other relicts) of ordinary members.

III. RIGHTS AND DUTIES OF RELICTS.

§ 11. The relicts of the ordinary and extraordinary members shall enter upon the enjoyment of their pensions at the end of the month of decease and the after month (*Nach-monat*).

The widow shall draw her pension until her death or remarriage. In both cases her pension shall be transferred without reduction to the legitimate children of the deceased husband, if there are such, and shall continue to be paid until the youngest child shall have been sufficiently provided for or shall have passed the twenty-fifth year of life; provided, however, that the portion of the child or children who may have been provided for or who may have passed the twenty-fifth year shall accrue to those children who are not as yet provided for and have not completed the twenty-fifth year of life.

§ 12. If there is no widow the children shall at once enter upon the enjoyment of the pension. Should a child be already provided for at the death of the father or of the widow he or she shall be wholly excluded from participation in the pension.

§ 13. The pension may be expended without reduction in the home country or in foreign countries.

§ 14. In addition to the pension, upon the death of a member, inclusive of extraordinary members, a sum of 30 florins (54 marks) shall be paid at once as contributions to the cost of burial.

§ 15. If the deceased was not married, or a widower leaving no children entitled to pension, his heirs shall receive, once for all, 60 florins (108 marks), which shall include the 30 florins (54 marks) for the above (§ 14) burial expenses. The payments under §§ 14 and 15 shall be made not from the interest of the invested assets but from the fundamental assets.

Upon the death of a member the administration shall transmit to the relicts written notice of the amounts due them.

§ 16. The amount of the annual pension shall be determined by the number of existing widows and, respectively, orphans and by the revenue from interest.

From this revenue there shall be deducted, in addition to the necessary expenses, 30 florins (54 marks) to be added to the capital mass; the remainder shall be divided among the relicts of the members in equal shares: *Provided, however*, That the relicts of extraordinary members under § 10 shall enjoy only half shares. The receipts for the payments under §§ 10, 15, and 16 are free from stamp duty under the ministerial decree of August 17, 1860.

§ 17. In the computation of the revenue not only the amount of actually paid interest, but also the interest due shall be considered.

§ 18. The relicts residing in foreign parts in collecting their pensions shall have to establish their legitimacy by authoritatively certified proof of existence, and at the same time, on the one hand, the widows as to their continued widowhood, and on the other hand the adult children as to their not being provided for.

§ 19. A widow shall never be competent to receive more than 500 florins (900 marks) of pension from the private widows' fund of the university. Any eventual surplus of the revenue shall then be added to the capital.

IV. ADMINISTRATION.

§ 20. All affairs of the widows' fund not reserved for the general assembly of the ordinary members under § 10, letter *a*, or intrusted to the administrators alone, shall be subject to the decision exclusively of the royal academic senate under the presidency of the prorector, with the proviso of government approval whenever this may be required.

The senate shall elect three members of the widows' fund from its own midst as administrators for a period of four years.

§ 21. These administrators shall execute the status and shall in no way deviate therefrom. If a decision is to be made in accordance with a certain observance, this can be done only after a decision by the senate as to the existence of such observance. As a general rule the administrators shall report in all difficult cases to the senate. However, in matters concerning the widows' fund no definitive decision can be reached by the senate without first hearing the report and opinion of the administrators.

§ 22. These elect from their midst a president and divide the business duties among themselves by agreement. The drafts of papers shall be signed by all the members of the administration, the papers themselves as issued only by the president.

§ 23. The judicial affairs of the private widows' fund shall be attended to by the syndicus of the university, the accounts and financial affairs by the questor after previous understanding with the administrators and after previously obtained approval of the royal academic senate and the royal state ministry of the interior for church and school affairs.

§ 24. The administrators shall effect the safe loaning out of money capital and notice for its return. In this they are subject to the statutory directions given to the administrative council concerning the loaning of money capital under personal liability in case of nonobservance.

§ 25. The administrator shall have the right to bring suit against tardy debtors and to issue authorization thereto under their names and seals or under the seal of the university for this purpose.

§ 26. At the close of each year they shall submit to the senate a statement as to the general condition of the widows' fund.

§ 27. The administrators shall perform their duties gratuitously. However, their expenses for writing material, etc., shall be defrayed from the private widows' fund.

§ 28. So long as the Frederick-Alexander University shall exist the private widows' fund can never be dissolved. Should the Frederick-Alexander University ever be dissolved the institution of the private widows' fund shall continue as long as there shall be left an ordinary or extraordinary member or a person entitled to draw pension. If, however, after dissolution of the university no person entitled to draw pension should exist, the assets of the private widows' fund shall be applied to some other benevolent object. In such case of dissolution of the university the existing regular (ordinary) members of the private widows' fund shall provide for suitable administration of the same and at the same time determine to what benevolent object the assets of the fund shall be applied after final dissolution of the institution.

B.—PENSION CONDITIONS OF THE STATE OFFICIALS AND UNIVERSITY PROFESSORS OF BAVARIA.

The salary of the statutory state officials, with the exception of the judges, is divided in accordance with the charter of the constitution into two parts, the salary of office and the salary for service. The salary of office after definite appointment can not be withdrawn, the salary for service can be withdrawn with the service, but only with this. (Supplement to the constitution, IX, §§ 18 and 19.)

The determination of the two parts of the salary is made in the first place in accordance with eventual provisions of the decrees of appointment; in the absence of these, in accordance with eventually existing general provisions, when these two are lacking, as is usually the case, in accordance with the provisions of the ninth supplement to the constitution (§§ 6-8). These provisions are as follows:

If the total salary consists only of a principal money payment, then, in the first ten years of service, seven-tenths of this amount; in the second decade of service, eight-tenths, and with the beginning of the third decade, nine-tenths are salary of office; the remainder is salary of service.

If the total salary consists of a principal and a supplementary amount, then, in the first decade, eight-tenths of the principal amount, and with the beginning of the second decade, nine-tenths thereof are salary of office; the remainder is salary for service.

The difference between salary of office and salary for service disappears when the state official has reached the seventieth year of life. In such event the total amount of salary becomes nonwithdrawable.

With judges there is no division into salary of office and salary for service. Their entire salary is nonwithdrawable. The absolute permanence of the salary of office and of the judicial total salary, and the permanence of the salary for service on the part of the state official in service, produces in detail the following effects.

The transfer of the state official can not effect any reduction with reference to the total salary ("*ständigen Gehalt*"). (Supplement IX of the constitution, § 20.) Nor can such a reduction take place with regard to the official position itself. The ninth supplement of the constitution provides further, in §§ 26 and 27, that in case of reemployment of a state official his acquired rights shall not be prejudiced.

In case of the death of a statutory state official, his claim upon salary continues for the month of death and the month following in favor of his heirs.^a

The salary conditions of the nonstatutory state officials are not regulated by general statutory provisions.

A method of compensation for state officials is practiced also in the granting of fees from those who may require the services of the state official. Fees may be allowed either in addition to a salary or constitute the exclusive service income.

In addition to salaries proper there are yet special money payments by the superior (*Dienstherr*) that are granted to the inferior officials (*Bediensteten*) without legal claim. Such voluntary allowances are the remunerations, gratifications, and patronage supports.

For the support of the statutory and nonstatutory state officials and their relicts the state has special funds.^b

The dismissal of a state official from service has certain effects upon his legal pecuniary claims.

During his provisional dismissal from service the salary of the official is partially continued. The portion of salary to be withheld with statutory officials is the salary for service, respectively, a part of the total salary corresponding with the statutory salary for service (*Dienstgehalt*), with other officials one-third of the salary.^c

If the prosecution of the accused is vacated or if he is acquitted or if a judge in the official disciplinary process is sentenced merely to reprimand or to a fine, the part of the salary withheld is to be restored. In other cases it is lost.^d

^a Pragmatik von 1805, Art. XXIV, § 6.

^b Compare J. Hock, Handb. d. gesamt. Finanzverwalt. I. Königr. Bayern, Bamberg, 1882-85. I, p. 56; III, p. 239 ff.

^c See Ges. z. R. St.-P.-O., Art. III, Abs. III-IV, Richterdisciplinargesetz, Art. 22, Abs. I.

^d See Ges. z. R.-P.-O. Art III, Abs. V, R.-D.-G. Art. 63.

On being placed at disposal or retired, the statutory state official receives the unwithdrawable portions of his salary as retirement salary.

On the other hand, he has no claim on retirement salary, if he or his superior (*Dienstherr*) has availed himself of the right to the one-sided dissolution of the official relation. The former may be done at any time, the latter only during the provisional period.^a

The nonstatutory (*nicht pragmatisch*) state officials are divided into several classes with regard to their treatment on cessation of service.

No claims to service pensions are accorded to officials employed on call and recall or as commissioners, or to the unsalaried state servants employed only on fees.

The functionaries, too, have no legal claim to pensions, although this does not exclude the allowance of pensions as a gratuity (*gnade*).

Since the second half of this century an administrative practice was introduced, under which treatment "in accordance with the ninth supplement of the constitution" is granted to certain classes of nonstatutory (*nicht pragmatisch*) salaried state officials or individual servants personally, in the event of inability to serve or to make a living under satisfactory performance of service. This, however, too is not done on the ground of any legal claim. Only a gracious favor is held in prospect.

A legal claim to pension is granted only in the cases in which certain classes of nonstatutory state officials after a certain time of service are accorded "stability," i. e., the right of pension under the provisions of the ninth supplement of the constitution.

In this, however, it must be emphasized that both this accordance of legal claim and that gracious favor do not extend to § 22 of the ninth supplement of the constitution.

The retirement salaries so granted are designated as "substantations."

IV. THE ROYAL WURTTENBERG UNIVERSITY OF TÜBINGEN.

A.—PROVISIONS FOR THE WIDOWS AND ORPHANS OF PROFESSORS, ETC.

For the pensioning of the widows and orphans of teachers and officials of the University of Tübingen the provisions of the Württembergian law of June 28, 1876, concerning the legal status of state officials and of the officials employed at Latin and real schools obtain. (Government Journal for the Kingdom of Württemberg, No. 22, p. 211 ff.) In the computation of the pensions of the university professors, inasmuch as the amount of the widow's and orphan's pension of relicts of state officials entitled to service pension is determined by the service pensions of the latter, there enters also the law of March 30, 1828, concerning the status of officials of the university (Government Journal No. 19, p. 157 ff.), which [law] contains special provisions concerning the computation of the pension of university professors and which are in effect now.

In accordance with this, as a rule—

1. The widows of deceased university professors and officials receive one-third of the retirement salary of the deceased husband; and
2. The legitimate children under 18 years of a deceased university professor or official (a) if the mother is still living, one-fifth of her pension; (b) if this is not the case, one-fourth of the pension of the widow.

As annual fee, the professors and officials of the university have to pay into the widows' fund for civil employees of the state 2 per cent of their service salary, of the salary paid while at disposal (*Wartegeld*), or of the retirement salary (*Ruhegehalt*). (Compare articles 7 and 10 of the law of March 30, 1828.)

The respective provisions of the law for officials of June 28, 1876, and of the law of March 30, 1828, are as follows:

^a Verfass. Beilage IX, §§ 2 and 22 A.

(a) *Law concerning the legal status of state officials, as well as of the officials employed at Latin and real schools, of June 28, 1876.*

ALLOWANCES OF RELICTS.

I. Salary after death (Sterbenachgchalt).

Article 54.—If an official under employment entitled to pension (art. 2, subarts. 1 and 2)^a or a retired official or a pensioner leaves a widow or legitimate children who shared the family residence with the deceased or who have not yet passed the eighteenth year of life, such relicts are entitled, as salary after death (*Sterbenachgchalt*) for the forty-five days succeeding the month of death (*Sterbemonat*), to the service salary, to the salary paid while at disposal (*Wartegeld*), or to the retirement salary of the deceased.

In the absence of such relicts the payment of the *Sterbenachgchalt* may be granted also, if the deceased leaves in destitution adult children, grandchildren, parents, brothers or sisters, nephews or nieces, or foster children whose provider he was, or if his estate is not sufficient for payment of the expenses of his last sickness and his burial.

The salary after death (*Sterbenachgchalt*), payment of which is to be made by the widows' fund with which the official was connected (§ 57), can not become subject to attachment.

The prepaid monthly salary shall not be subject to restoration from the estate of officials who may leave no relatives entitled to (*Sterbenachgchalt*) (salary after death) or whose inheritance does not pass to such relatives, as well as from the estate of officials who were employed without title to pension.

II. Pensions of widows and orphans.

Article 55.—If, waiving the persons named in article 56, an active or retired official who at the time of his death had claim to pension or a pensioner leaves a widow or legitimate children under 18 years, these shall receive from the widows' fund for civil state officials, beginning with the lapse of the *Sterbenachgchalt*, the following amounts of yearly pension:

1. For the widow, one-third of the retirement salary of the deceased ^b whether the latter has been at pension or not;
2. For each legitimate child under 18 years, (a) if the mother is still living, one-fifth of this pension; (b) in other cases one-fourth of the pension of the widow.

A claim to a widow's pension shall be lost if the competent court has decreed

^aArt 2, subarts. 1 and 2, of the law of June 28, is as follows:

"With regard to the appointment and dismissal of the ministers or chiefs of departments and other members of the privy council the provision of the constitutional charter, § 57, subpar. 1, shall continue in force.

"The officials who are appointed for life are enumerated in Appendix I of this law."

(The following officials are designated as employed for life in this appendix: The chancellor (*Kanzler*), the bailiff (*Amtmann*), and the cashier (*Kassier*); the ordinary and the extraordinary professors; the librarians who occupy this position as their chief office.)

^bConcerning the computation of the time of service which shall be considered in determining the retirement salary, as well as concerning the amount of retirement salary, article 39 ff. provide as follows:

Article 39.—The time of service to be considered in determining the retirement salary shall be computed beginning with the day of appointment for life. To this there shall be added—if an appointment to a position held on quarterly notice (Append. II of this law) or the unofficial employment in domestic, state, or school service of a candidate of officially recognized competence, or the academic activity as private docent (*Privatdozent*) preceded—the time of service passed in such employment or activity after completion of the twenty-fifth year of life.

At the University of Tübingen, under Appendix II of the law of June 28, 1886, the following are employed on quarterly notice: The language teachers, the music teachers, drawing teachers, riding teachers; then the dancing master, fencing master, the teacher of gymnastics; furthermore, the registrar of the university, the copyist of the university, the assistants at the library, the prosecutor, the preparator at the zoological cabinet, the medical assistants and stewards in the several clinical hospitals, the gardener, the mechanic of the technological and physical institute, and, finally, the beadles and the servants at the university institutes.

Article 40.—To the civil service there shall be added the time of active military service in the imperial army or in the imperial navy, as well as the time of former active military service in one of the States of the German Federation.

If, however, participation in active military service occurs during employment in the civil service, double computation of the same period of time shall be inadmissible.

Time of service before the eighteenth year of life shall not enter into computation.

Only the military service given in time of war or with a mobilized or reserve army corps shall be computed without regard to the time of life.

As time of war there shall be counted in this respect the time from the day of an ordered mobilization which is followed by a war.

Article 41.—For each campaign in which an official has served in the imperial army,

divorce or the annulment of the marriage or, before January 1, 1876, the permanent separation from bed and board.

Each child from such separated marriage, however, shall receive until completion of the eighteenth year of life one-fourth of the pension to which the mother would have had claim.

In computing the annual amounts of pension, the resulting pfennige are estimated as a full mark.

To the King is reserved the right to consider distinguished merit of an official in determining the pension for his widow and orphans in accordance with the special circumstances.

Article 56.—[Concerns the pensioning of the widows and orphans of directors or teachers who may have been appointed for life at an educational institution in accordance with article 16 of the law of July 6, 1842.]

in the imperial navy; or in the army of one of the States of the German Federation in such a way that he actually faced the enemy or followed mobilized troops into the field or was on board of a vessel or ship of the imperial navy destined to be used against the enemy, one year shall be added to the actual period of his service.

The provisions of the imperial law of March 31, 1873, concerning the status of the imperial officials, § 49, subpars. 2 and 3, and § 50, shall apply equally here.

Article 42.—The time of service shall also include the time during which an official—

1. Has been in temporary quiescence with payment of *Wartegeld* (salary while waiting for appointment); or
2. Held a life appointment as imperial official; or
3. Was in the service of the royal court or the chamber of the royal court domain, with title to pension; or
4. Held an appointment in the domestic church or public school service or was employed unofficially (*unständig*) in such service under the provisions for such service with title to its consideration in the computation of time of service; or, finally,
5. Has been in unofficial (*unständig*) employment or as obligated personal assistant of an official in the domestic state service or at an educational institution named in Appendix I of this law, after completion of the thirtieth year of life and after passing a service examination, and in so far as the provision of article 39 does not apply to him.

Article 43.—With the approval of the King, there may also be added for special reasons to the time of service entitled to pension the time during which an official—

1. Has been in the service of another State of the German Federation, or even of a State not belonging to the German Empire, in corporate service or in private service; or
2. Has acted as attorney or notary.

Article 44.—On the other hand, in computing the time of service, there shall not be considered the time which passed before loss of service on the part of an official who at an earlier period lost his office by criminal or disciplinary process and was reappointed later on.

With the exclusion of this case, a preceding interruption of state or school service shall not exclude the consideration of earlier years of service from computation of the service time entitling to pension on the part of an official.

IV. Amount of the retirement salary and its payment.

Article 45.—The basis for the computation of the amount of the retirement salary is the salary (art. 11, No. 1) which the official drew during the last year before the day of his retirement.

With an official in temporary quiescence with *Wartegeld*, in the event of his retirement, the retirement salary is computed on the salary which he drew within the last year before the day of his temporary quiescence.

Article 46.—If an official who occupies several offices at the same time is relieved at the time of his retirement of only one or several of them, the provisions of article 16 shall be respectively applied.

Article 47.—The retirement salary, with entrance upon the tenth year of service, as well as in the case of article 30, amounts to 40 per cent of the service salary. With each further year of service, including the fortieth, it is increased—

1. By $1\frac{1}{2}$ per cent of the amount of the salary up to and including 2,400 marks; and
2. By $1\frac{1}{2}$ per cent of the amount of the salary exceeding 2,400 marks.

The King reserves the right in determining the retirement salary of an official to consider distinguished merit appropriately.

The highest amount of a retirement salary is fixed at 6,000 marks.

In computing the annual amounts of retirement salaries the resulting pfennige are estimated at a full mark.

For articles 7 and 10 of the law of March 30, 1828, making further provision for the computation of the pensions of the widows and orphans of university professors, see below, page 191.

Article 25. referred to under article 46, provides:

"If an official occupies several offices at the same time and is relieved by quiescence of only one or more of them, it shall be determined whether heretofore he has drawn for each of these offices a separate salary or a total salary for all."

In the first case he retains the salary of the office or offices of which he is not relieved without reduction and draws the *Wartegeld* only for the position or positions which cease.

In the second case the share of the discontinued office in the total salary shall be determined with regard to the relative importance of each of the united offices and with regard to other conditions, and then the partial *Wartegeld* computed in accordance with the above provisions.

Article 57.—The widows' and orphans' pensions, designated in articles 55 and 56 shall be defrayed first from the resources of the fund for widows' pensions established under the law of June 28, 1821, §§ 41 to 43, and under law A of July 6, 1842, article 28, additional need from allowances from the exchequer of the state.

The direct income of these pension funds shall consist, in addition to the interest from the capital—

1. Of the entrance fees, one-fourth of the salary (art. 11) of the official on first appointment with title to pension, and one-fourth of increments of salary.
2. Of the annual fees, annually 2 per cent of salary (*Wartegeld*) and retirement salary.

The entrance fees and annual fees of the directors and teachers of educational institutions, as per article 16 of law A of July 6, 1842, shall belong to the widows and orphans' fund of the teachers; the entrance fees and annual fees of other officials, to the widows and orphans' fund of civil state officials.

3. In addition thereto both funds shall retain, respectively, the deductions from the pensions paid by them, which (deductions) are made on account of inequality of age on the part of husband and wife, if the wife is by more than 18 years younger than her deceased husband.

These deductions shall be made under the following schedule: If the widow is more than 18 and up to 22 years younger, one-sixth; more than 22 and up to 26 years younger, two-sixths; more than 26 and up to 30 years younger, three-sixths; more than 30 and up to 34 years younger, four-sixths; more than 34 and up to 38 years younger, five-sixths, of the widows' pensions designated under articles 55 and 56.

If the widow is more than thirty-eight years younger than her deceased husband, she shall receive no pension whatever. The difference in age shall be computed from the birthdays. The deductions from the widows' pension shall have no influence upon the amount of pensions due to orphans.

4. Finally, an income is derived by the widows' fund of the teachers from the examination fees which, under the law concerning fees of June 23, 1828, in connection with the law of June 28, 1875 (Government Journal, p. 327), shall be imposed on candidates for service as teachers in the above-mentioned educational institutions.

Article 58.—The obligation to pay entrance fees begins with the entrance upon enjoyment of a salary with claim to pension, respectively, of an increase in the same. They shall be paid in the course of a year in equal rates corresponding with the terms of payment of salary.

Article 59.—The annual contributions shall be due on December 31 of each year and shall be computed and collected on this day on the basis of the money due the officials in salary entitled to pension (*Wartegeld*) or retirement salary.

For the time of service which an official before his appointment with title to pension may have passed in a position on quarterly notice or in nonstatutory (unständig) employment, he shall have to make subsequent payment of the lawful annual contributions from the same in suitable terms of payment, in so far as that time of service shall have entered into the computation of his time of service entitled to pension under articles 39 and 42, Nos. 4 and 6. These terms of payment shall be computed for the calendar years in which the official employed in a position on quarterly notice shall have drawn annual salary on December 31 on the basis of this salary; for the computable time outside of these years, they shall be computed on the salary actually drawn.

Article 60.—If, under articles 40 and 41, the computation of the retirement salary of an official demands consideration of the time of military service which has preceded his appointment in state or school service (art. 39), the official shall make subsequent payment of the annual contributions for that previous time on the basis of the salary paid him at the time of this appointment.

For the additional service year with which he is credited on account of a campaign in addition to his actual military service there shall be no payment of an additional contribution.

Article 61.—Upon transfer from the service of the royal court, or of the chamber of the royal court domain, into the State or school service (art. 42, No. 3), so long as this is under mutual consent, there shall be no subsequent payment of annual contributions and the entrance fee shall be collected only on the increase in salary.

Upon transfer from the imperial service (art. 42, No. 2), or from the voca-

tions named under article 43, into the state or school service, the entrance fees and the annual contributions which require subsequent payment for the computable previous time of service or vocation shall be computed on the basis of the salary entitled to pension fixed upon entrance into the state or school service, unless by special agreement made with the approval of the King a different basis has been fixed upon.

Article 62.—If, with officers that require participation in one of the widows' funds for civil officials, for clericals, for teachers in Latin and real schools, or for public school-teachers, there shall occur transfers to an office of different category, there shall be no subsequent payment of annual fees for the time of previous participation in any of these funds, and the entrance fee shall be paid only on the increase in salary entitled to pension. The widows' funds shall not be required to balance accounts with each other concerning previously paid entrance fees and annual contributions.

Upon transfer to positions which entail participation in the widows' fund for clericals it shall be the prerogative of the King, however, under certain circumstances to relieve the official of entrance with this fund and to grant him continued connection with the widows' fund of the state officials.

Article 63.—If a *Wartegeld* or retirement salary has been wholly or partially suspended under articles 23 and 52, the annual contributions to the respective widows' fund shall nevertheless continue in full.

In case of the voluntary retirement from office, or loss of office, on the part of an active official, and also if the loss of *Wartegeld* or retirement salary took place under the provisions of article 27, Nos. 2 and 4 to 6, and article 51, Nos. 2 and 3,^c the official, the quiescent official, or pensioner shall lose at the time for his relicts every claim upon the respective widows' fund.

The statutory entrance fees and annual contributions shall not be paid back.

If an official by his reappointment acquires claim to the computation of his previous time of service under article 44, subparagraph 2,^b the entrance fee previously paid by him shall not be paid again.

Article 64.—The officials belonging to the Catholic clergy are relieved from the payment of entrance fees and annual fees, but shall pay into the exchequer of the state, on the other hand, on first appointment and on increase of salary the lawful perquisites; and this shall be done, in so far as they may be employed in educational institutions under article 16 of law A of July 6, 1842, in accordance with perquisite requirement for parsons, deacons, etc., and by others in accordance with the requirement for the higher clergy.

Article 65.—The pensions of widows and orphans shall be paid monthly in advance.

The provisions of article 13 shall apply to these respectively.^c

The claim upon pension shall cease—

- (a) For the widow with the end of the month in which she dies or again contracts marriage.
- (b) For each child with the end of the month when he or she shall complete the eighteenth year of life, marries, attains majority by dispensation, or dies.

Article 66.—The claim to a widow's or orphan's pension shall be suspended if the person entitled thereto loses German citizenship, until its eventual restoration.

^a Article 27, Nos. 2 and 4 to 6, is as follows: The right to draw *Wartegeld* shall cease—

2. If the official declines reappointment in the domestic (*inländisch*) service (art. 26);
4. If he is dismissed from service or loses it under the law;
5. If he lose German citizenship;
6. If he makes his residence beyond the confines of the German Empire without the approval of the King.

Article 51, Nos. 2 and 3, is as follows: "The right to draw retirement salary shall cease:

- "2. If the pensioner declines appointment in the domestic service (art. 50, subparagraph. 2);

"3. In case of article 80, subparagraph 2."

Article 80, subparagraph 2, is as follows: "Loss of life and of retirement pay may be adjudged against a permanently retired official, moreover, by disciplinary process on account of deeds committed at the time of active service which, had they been previously known, would have resulted in dismissal. The process shall be waived if the official, assuming the costs, voluntarily resigns his claim upon title and retirement pay."

^b See above, Note, p. 188.

^c Article 13 is as follows: "Officials can cede, pawn, or otherwise transfer their claims to the payment of service income (*Wartegeld*), retirement salary, and benefits that take the place of retirement salary (arts. 31, 32) with legal effect only in so far as these amounts are legally subject to attachment. Notice shall be given to the fund that makes payment in a public document to be delivered to the fund.

tion. Otherwise the full enjoyment of pensions does not require residence in the native country.

Article 67.—The orphaned children of an official that may remain incapable of making a living and destitute may be allowed suitable benefits from the exchequer of the state with approval of the King.

Article 68.—Suitable benefits from the exchequer of the state may be assigned with approval of the King to the relicts of an official appointed for life who, for want of statutory provisions (art. 55), have no claim to pensions, and also to the relicts of an official not appointed for life.

(b) *Law of March 30, 1828, concerning the status of officials of the university.*

Article 7.—For the ordinary professors one-third of the normal salary will be taken into computation by the fund in which they participate as compensation for college honoraria, with reference to transfers, quiescence, and pensions.

Article 10.—With extraordinary professors their full personal salaries, but not their allowances from college honoraria, shall be considered with reference to transfers, quiescence, and pensions.

B.—THE PENSION STATUS OF THE STATE OFFICIALS AND UNIVERSITY PROFESSORS.

[From Government Annual (*Regierungsblatt*) for the Kingdom of Wurttemberg, Stuttgart, 1887, pp. 155 and 160.]

List of the officials who are appointed for life.

D. Department of church and school:

(a) Institutions for instruction and education—

At the university—

The chancellor, the bailiff, and the cashier, the ordinary and the extraordinary professors, the librarians who hold their position as their chief office.

At the higher theological seminaries—

The economist (*Oekonomie Verwalter*) at the Evangelical Theological Seminary and at William's Institute (*Wilhelms stift*) at Tübingen.

At the institution for agricultural instruction—

The director, the cashier, and the secretary; also the ordinary professors of the agricultural institution at Hohenheim, the director and the principal teacher of the veterinary school, the director of the viticultural school.

At the schools for technical instruction—

The administrator and the ordinary professors of the Polytechnicum, the director and principal teachers of the mining school.

List of the officials appointed under quarterly notice.

V. In the department of church and school:

(a) Institutions for instruction and education—

At the university—

The teachers of languages, the music teachers, the drawing teachers, the riding teachers; also the dancing master, the fencing master, the teacher of gymnastics; further, * * * the actuary of the university, the copyist of the university, the library assistants, the prosecutors, the preparator at the zoological cabinet, the medical assistants and stewards at the several clinical hospitals, the gardener, the mechanician at the technological and physical institute; finally, the bedels and servants at the university institutions.

At the higher theological seminaries—

The steward and janitor (*Thorwarte*) at the Evangelical Theological Seminary and at William's Institute at Tübingen.

V. In the department of church and school—Continued.

(a) Institutions for instruction and education—Continued.

At the agricultural institutions—

The special teachers and assistant teachers, the station chemist, bookkeeper, warden (*Aufscher*), gardener, steward, servant (*Diener*) employed at the agricultural institute at Hohenheim; the special teachers (including the forge instructor—*Lehrschmied*), the assistant teachers, servants at the veterinary school; the special teachers and assistant teachers at the agricultural schools and at the school for viticulture, including the master of the vineyard and gardener; those directors and teachers of agriculture at the agricultural winter schools who, at the same time, are employed as agricultural experts and traveling teachers.

At the technical institutions—

The special teachers and assistant teachers employed at the Polytechnicum; also the assistant administrator, the assistant librarian, the mechanician, the pattern maker, the gardener, the assistant workman at the institution for testing material (mechanician), and the servants; the special teachers and assistant teachers employed at the building trades school (*Baugewerkschule*); also the janitor, the principal teachers at the technical schools for supplementary training (*Fortbildungsschulen*).

[From Government Annual (*Regierungsblatt*) for the Kingdom of Wurtemberg, Stuttgart, 1876, p. 221-228.]

Third section: Permanent retirement (Versetzung in den Ruhestand).

I. THE CLAIM TO RETIREMENT SALARY.

Article 29.—No claim to permanent retirement is accorded to officers appointed for life.

On the other hand, the Government is authorized, on request of such an official (art. 34) or without his consent (art. 35 ff.), to order his retirement if the official either—

(1) Has completed the sixty-fifth year of life and by his age is hindered in his activity, or

(2) Has been incapacitated for service by some bodily infirmity or by debility of his bodily or mental powers, or

(3) Has been prevented by sickness for more than one year from attending to his office.

In the event of permanent retirement an official shall have claim to a retirement salary for life (pension) from the exchequer of the State after completing nine years of service: *Provided, however*, That this retirement is not occasioned by an infirmity caused by his own fault.

Article 30.—If the incapacity for service is due to sickness, bodily or other injury, brought upon the official in the exercise of his service or caused thereby without his own fault, he shall have claim to retirement pay for life even without preceding nine years of service.

Article 31.—If, however, an official appointed for life is retired before the expiration of nine years of service, the Royal Government shall have authority to grant him from the exchequer of the State, instead of retirement pay, a benefit up to 40 per cent of his salary.

Article 32.—The officials employed under quarterly notice or discharge at any time shall have no claim to retirement pay.

If, however, one of these officials is incapacitated for service without his fault, he may be granted suitable benefit from the exchequer of the State according to the degree of his necessity.

Article 33.—If the retired official has his official residence beyond the limits of the Kingdom the expense of his removal to the residence chosen by him within the Kingdom shall be paid to him.

II. EVIDENCE OF INCAPACITY FOR SERVICE.

Article 34.—As evidence of incapacity for service (art. 29, Nos. 1-3) of an official seeking retirement there shall be required the declaration of the official authority immediately superior to him that it considers the request well founded.

To what extent other evidence shall be required or shall be deemed sufficient as opposed to the declaration of the immediately superior authority shall depend on the judgment of the authority which has decision as to the retirement.

Article 35.—If an official to whom the reasons for retirement apply fails to ask for it, the superior authority shall inform him that his retirement is under consideration, stating the reasons therefor and the retirement salary to be allowed to him.

If the official does not raise objections to this information within a term of six weeks the case shall be disposed of as if he had himself requested retirement.

Article 36.—If objections are raised to the retirement, or if the information prescribed in article 35, subparagraph 1, can not be delivered to the official, the authorized ministry shall first decide whether proceedings are to be continued. In this event the official commissioned thereto by the ministry shall consider the facts in dispute, examine the necessary witnesses and experts under oath, and permit the official who is to be pensioned to attend the hearings.

In conclusion, the official to be pensioned shall be heard concerning the result of the investigation with his declaration and motion.

A sworn recorder shall attend the proceedings.

The closed judicial acts shall be submitted to the ministry.

The cash expenses of the eventually unsuccessful investigation, caused through the fault of the official under consideration, shall be charged to him.

Article 37.—The involuntary retirement of judges can take place only if the highest court of justice (*Landesgericht*) shall have decided that the legal causes therefor exist.

Article 38.—The decision as to whether and for what time the retirement of an official shall take effect, and what retirement salary shall be paid him, is made by royal order on motion of the authorized ministry, which, with reference to the latter point, shall secure the approval of the ministry of finance.

III. COMPUTATION OF THE TIME OF SERVICE.

Article 39.—The time of service to be considered in fixing the retirement salary shall be computed beginning with the day of appointment for life. To this shall be added, if there existed a previous appointment to a position on quarterly notice (Suppl. II of this law) or the nonstatutory (*unstündig*) employment in the domestic state or school service of a candidate with certificate of fitness for higher state or school service or academic activity as private docent, the time of service passed in such position, respectively, in such employment or activity after completion of the twenty-fifth year of life.

Article 40.—To the time of civil service there shall be added the time of active military service in the imperial army or navy, as well as the time of previous military service in one of the States belonging to the German Federation.

If, however, participation in active military service takes place during the time of civil service, the double computation of the same period shall not be admissible.

Time of service before the eighteenth year of life shall not be considered in the computation.

Only the time of military service in a mobilized or in a reserve army corps in time of war shall be considered in the computation without regard to age.

The time from the day of the order of mobilization followed by a war to the day of demobilization shall be considered as time of war in this respect.

Article 41.—One year shall be added to the actual period of service of an official for each campaign in which he has served in the imperial army or navy or in the army of one of the States belonging to the German Federation in such a way that he actually came before the enemy or followed mobilized troops into the field or was on board of a ship or vessel of the imperial navy destined to be used against the enemy.

The provisions of the imperial law of March 31, 1873, concerning the legal status of imperial officials (§ 49, subpar. 2, and § 50^a) shall apply here in equal measure.

Article 42.—The time of service shall also include the time during which an official—

- (1) Has been in temporary quiescence with payment of *Wartegeld*; or
- (2) Has held a life appointment as imperial official; or
- (3) Has been in the service of the royal court or the chamber of the royal court domain with title to pension; or
- (4) Has held appointment in the domestic church or public school service or employed unofficially (*unständig*) in such service under the provisions for such service with title to its consideration in the computation of time of service; or, finally,

(5) Has been in unofficial (*unständig*) employment or as obligated personal assistant of an official in the domestic (*inländisch*) state service or at an educational institution named in Appendix I of this law, after the completion of the thirtieth year of life and after passing a service examination, and in so far as the provision of article 39 does not apply to him.

Article 43.—With the approval of the King, there may also be added for special reasons to the time of service entitled to pension the time during which the official—

(1) Has been in the service of another State of the German Federation or even of a State not belonging to the German Empire, in corporate or in private service; or

(2) Has acted as attorney or as notary.

Article 44.—On the other hand, in computing the time of service there shall not be considered the time which passed before loss of service on the part of an official who, at an earlier period, lost his office by criminal or disciplinary process and was reappointed later on.

With the exclusion of this case, a preceding interruption of the state or school service shall not exclude the consideration of earlier years of service from computation of the service time entitling to pension on the part of the official.

IV. AMOUNT OF RETIREMENT SALARY AND ITS PAYMENT.

Article 45.—The basis for the computation of the amount of retirement salary is the salary drawn by the official during the last year before the day of his retirement.

For an official in temporary quiescence with *Wartegeld*, in the event of his retirement, the retirement salary is computed on the salary drawn by him during the last year before the day of his temporary quiescence.

Article 46.—If an official occupying several offices at the same time is relieved at the time of his retirement of only one or several of these, the provisions of article 16 shall be respectively applied.

Article 47.—The retirement salary, with entrance upon the tenth year of service, as well as in the case of article 30, amounts to 40 per cent of the service salary.

For each subsequent year of service, including the fortieth year, it shall be increased as follows:

(1) By $1\frac{1}{2}$ per cent of the amount of the salary up to and including 2,400 marks.

(2) By $1\frac{1}{2}$ per cent of the amount of the salary over 2,400 marks.

In determining the retirement salary the King may appropriately consider distinguished merit.

The highest amount of a retirement salary is fixed at 6,000 marks.

In computing the annual amounts of retirement salaries the resulting pfennige shall be counted as a full mark.

Article 48.—The retirement salary of a minister of state shall be 7,000 marks.

^aThese are as follows:

§ 49, subpar. 2. Whether a military enterprise in this respect shall be considered as a campaign and in how far with wars of longer duration several years shall enter into computation, shall be determined in each case by the Emperor. For the past the provisions made in the several States of the Federation concerning this matter shall continue in force.

§ 50. In how far the time of imprisonment in a fortress or as a prisoner of war may enter shall be determined under the statutory provisions for the pensioning of military persons of the imperial army or navy.

For the remaining members of the privy council the retirement salary shall be computed under the provisions of article 47. However, these shall have claim to retirement salary even if they have not entered upon the tenth year of service. Their retirement salary shall not exceed 6,000 marks, but also not fall below one-half of their service salaries, provided this half does not exceed 6,000 marks.

Under special agreement the retirement salary of a minister of state may be fixed up to 9,000 marks, that of other members of the privy council up to two-thirds of their service salaries within the limits of the maximum of 6,000 marks. This new provision shall apply also to agreements already entered into in such a way that a florin (*gulden*) shall be counted as 2 marks.

Article 49.—Payments of retirement salaries shall be made monthly in advance.

Unless at the request or with the expressed consent of the official an earlier time has been fixed upon, payment of the service salary or Wartegeld shall cease and payment of the retirement salary begin with the end of the month after the month in which the decision as to permanent quiescence and the amount of the retirement salary shall have been communicated to the official. During this period the official shall continue in the performance of his official duties, unless he has been previously relieved thereof; eventual expenses for substitutes for teachers under articles 1 and 16 of the Law A of July 6, 1842, as well as the expenses of substitution in cases of sickness (art. 18, concluding paragraph) are to be paid.

The payment of the full amount of retirement salary is not conditioned on residence in the native country (inland) on the part of the pensioner.

V. CESSATION AND REDUCTION OF RETIREMENT SALARIES.

Article 50.—A pensioner shall not be deprived of the right to make application for reappointment.

Special attention shall be given to those officials who were retired for one of the reasons given under article 29, paragraph 2, Nos. 1 and 2, and who subsequently demonstrated their ability to serve.

Such an official may be reinstated in the service also under the provisions of article 26.

Article 51.—The claim to payment of retirement shall cease—

(1) If the pensioner is reinstated in the imperial service, in the state service, in the church or public school service, in a position entitled to pension, with a salary at least equal to his former salary;

(2) If he declines reappointment in the home service (*inländischen Dienst*), article 50, paragraph 2; and

(3) In the case of article 80, paragraph 2.

Article 52.—The claim to retirement salary shall be suspended—

(1) If, and as long as, a pensioner shall draw a service salary in the public service (compare art. 51, No. 1), in so far as the amount of this salary, in addition to the retirement salary, shall exceed the amount of the service salary drawn before retirement;

(2) If a pensioner shall lose the German citizenship (*Indigenat*) until the eventual restoration of the same.

The provision of No. 1 shall respectively apply if the pensioner draws a retirement salary on an appointment in another state or in the imperial service.

Article 53.—Cessation of the retirement salary in the cases of article 51, Nos. 1 and 2, also reduction or restoration of the same in the cases of article 52, shall take effect with the beginning of the month following the event which has occasioned such change. In the cases of article 51, No. 3, the claim to the retirement salary shall cease when the sentence shall take effect.

In the event of merely temporary reemployment in the public service on per diem pay or other remuneration the official shall retain his retirement salary without reduction for the first six full months of such employment, and the provision of article 52, No. 1, shall take effect only with the beginning of the seventh month.

V. THE ROYAL UNIVERSITY OF SAXONY, AT LEIPZIG.

1. THE PENSIONING OF THE WIDOWS AND ORPHANS OF THE UNIVERSITY PROFESSORS.

At the Royal University of Saxony, at Leipzig, there exists a "general widows and orphans' fund," with the object of granting widows' and orphans' pensions to the widows and orphans of deceased ordinary, honorary, and extraordinary professors of the university.

Under the revised statutes of this fund, approved by the royal ministry of cultus and public instruction, under date of April 29, 1892, the widow of an ordinary professor deceased as member of the fund receives a widow's pension of 1,800 marks; the widow of an ordinary honorary professor or of an extraordinary professor, a pension of 1,000 marks, or, if this is more, one-fifth of the salary drawn by the deceased as professor, including the value of free service residence, which for this purpose is computed at 600 marks annually.

Each legitimate or legitimized child of the professor deceased as member receives as long as its own mother is living one-fifth, and after her death three-tenths of the widow's pension.

Grandchildren, illegitimate, adopted, and stepchildren of the deceased receive no pensions.

In cases of exceptional necessity of the relicts of members the ministry of cultus and public instruction may, upon motion of the academic senate, grant them a pension exceeding the amount of the statutory pension by not more than one-fourth.

Contributions to the widows and orphans' fund are not collected.

The detailed provisions of the fund are as follows:

Revised statutes of the general widows and orphans' fund of the University of Leipzig.

§ 1. There exists at the University of Leipzig a general widows and orphans' fund. The assets of this fund constitute an independent *pia causa*. Its administration is carried on by the department of accounts (*rentant*) gratuitously under the provisions agreed upon between the highest state authority and the university for the administration of the university funds, in so far as other provisions have not been expressly fixed.

§ 2. In order to meet the money requirements of this fund, the following capitals and revenues have been permanently assigned to it:

1. All the capitals and revenues of the treasury of the professors' widows' fund;
2. A capital of 10,300 marks, together with its interest, from the treasury of the widows' fund of the medical faculty;
3. The capital and revenues of the widows' fund of the college of small princes;
4. The Wenck legacy for the college of small princes;
5. The Wendler legacy for the widows' fund of the university;
6. The Boyberg legacy for the university;
7. From the Knaups Institution an annual fixed revenue of 3,000 marks;
8. From the alms fund a yearly fixed revenue of 800 marks;
9. The interest from the widows' fund of the faculty of jurisprudence;
10. The interest of the widows' fund of the philosophical faculty.

§ 3. In so far as the proper revenues of the general widows and orphans' fund are not sufficient to meet its requirements, the deficiency shall be contributed by the exchequer (*Haupt Kasse*) of the university.

§ 4. The interest of the capitals assigned to this fund, as well as all the revenues assigned to it, shall be applied exclusively to the pensions for the widows and orphans of the professors of the University of Leipzig in accordance with these statutes. The accounts division of the university shall annually submit the accounts to the academic senate and eventual admonition before delivery to the ministry.

§ 5. The general university widows' fund may accept advantageous gifts of all kinds.

Such increase of its stock capital shall in no way affect capitals or revenues assigned to it from any other source.

New institutions for pension purposes for the benefit of all the widows and

orphans of the members of the general widows and orphans' fund may be added to this fund in case the opposite is not expressly ordered.

Allowances of all or any widows and orphans from institutions shall not be computed in any form in their statutory widows and orphans' pension.

§ 6. All ordinary, all honorary and all extraordinary professors of the university who draw salaries as university professors shall become members of the fund on the day their salary from the university fund shall begin.

§ 7. Participation in the widows' fund shall end with voluntary resignation of the professorship, without regard to the retention of the titles and rights of honor of his former position on the part of the resigning professor.

It shall not cease on account of the pensioning of the member because of age or sickness, his suspension from office, his dismissal by disciplinary process.

§ 8. The pension of the widow of an ordinary professor deceased as member shall be 1,800 marks, for the widow of an ordinary honorary professor or of an extraordinary professor 1,000 marks, or, if this is more, one-fifth of the salary drawn by the deceased as professor, including the value of free service residence, which for this purpose shall be computed at 600 marks annually.

§ 9. Each legitimate or legitimized child of the deceased member shall receive, as long as its own mother is living one-fifth, after her death three-tenths, of the widow's pension.

Grandchildren, illegitimate, adopted, and stepchildren of the deceased shall receive no pension.

§ 10. In cases of exceptional necessity of the relicts of a member the ministry of cultus and public instruction may, on motion of the academic senate, grant them a pension not exceeding the statutory pension by more than one-fourth.

§ 11. The claim to pension shall begin on the day on which the claim to the salary of the deceased or to the benefit by grace (*Gnadengenuss*) ends or the latter shall have fallen below the amount of the pension. It shall be independent of the residence of the claimant.

The widow shall prove to the university accountant her right to the claim by submission of her marriage certificate; the right to the claim on the part of the orphans shall be proved to him by submission of the certificate of birth by the mother or guardian.

§ 12. The pension shall be paid for the current quarter upon receipt by the accounts division on March 1, June 1, September 1, and December 1. Only in cases of extinction of the pension (§13) the accounts division may make payment at an earlier date.

The orphans' pension shall be paid to the mother as long as she remains unmarried; after her death or remarriage, to the guardian of the orphans.

If persons entitled to pension are absent, they shall legally authorize an attorney at Leipzig to receive the pension or transmit to the accounts division of the university a receipt drawn up in their own handwriting.

Moreover, widows living abroad and the guardians of orphans living abroad shall produce a life certificate drawn in legal form at each collection of payment.

§ 13. The claims to pensions become extinct:

1. To widows' pensions—

(a) With the last day of the month in which the widow dies;

(b) With the day of her remarriage.

2. To orphans' pensions, with the last day of the month—

(a) In which the orphan completes the eighteenth year of life;

(b) In which he or she is previously married;

(c) E previously appointed in public or private service with a yearly salary equal to the amount of pension.^a

§ 14. To unmarried daughters and infirm sons of a member who are over 18 years old, without fortune and unable to make a living without their fault, the ministry of cultus and public instruction may, in case of need and on motion of the academic senate, grant suitable assistance. The continuance of such assistance shall be determined by the ministry.

§ 15. The provisions of §§ 8 to 14 shall apply also to the widows and orphans of the members of the fund who may have died before April 1, 1892, as well as to those who on this day may still have been members of the fund. However, such widows and orphans shall be entitled to choose whether the pension shall

^a It should be observed that under § 57 of the revised statutes of the University of Leipzig the wife and the minor children of a professor discharged from office by disciplinary process do not lose their claims to their respective pensions.

be granted under the above provisions or under statutes and provisions previously in force. The choice shall be decided, if a widow and children entitled to pension are concerned, by the widow; if only children are concerned, by the guardian. Those entitled to this right shall decide within a term to be fixed by the academic senate, on penalty of the loss of their right of choice.

§ 16. The accounts division shall keep a record concerning the age of all the members and their wives, as well as concerning the number and age of their children, which shall be carefully revised and supplemented at least every five years.

The members shall, therefore, immediately upon their entrance, submit their certificates of birth, and, if they are married, also those of their wives and children; otherwise their further salary payments shall be withheld. Members who are married subsequently shall, under the same penalty, submit immediately after marriage the certificate of birth of the wife.

The academic senate shall keep a record which shall show, in tabular form, for each year, in accordance with the annual reports of the university accounts division, the number of members, widows, and orphans, the capital and cash assets of the fund, the sums of both items, and, finally, the increase in the property of the fund for the year.

Every five years the university widows' fund shall be subjected to a revision.

CONCLUDING PROVISION.

The revised statutes for the general widows and orphans' fund of the University of Leipzig shall take effect on April 1, 1892.

AUXILIARY AND DAUGHTERS' FUND.

On April 1, 1892, there was further established at the University of Leipzig, under the name of auxiliary and daughters' pension, an institution with the object of increasing the pensions due to the widows and orphans of its members from the general widows and orphans' fund; to support permanently unmarried legitimate or legitimized daughters and sons, unable to make a living, over 18 years of age, and children of deceased members, in so far as they may not be entitled to an orphan's pension, until completion of the twenty-first year of life; and, finally, to support in single benefits relatives of deceased members or of members in serious illness in case of urgent necessity caused by such death or illness.

The following statutes were approved on April 29, 1892:

Statutes of the auxiliary and daughters' fund of the University of Leipzig of April 29, 1891.

I. GENERAL PROVISIONS.

§ 1. With April 1, 1892, there shall be established at the University of Leipzig an institution under the name of the auxiliary and daughters' fund of the University of Leipzig.

§ 2. It shall serve three purposes:

1. The permanent increase of the pensions of the widows and orphans of its members, due them from the general widows and orphans' fund of the University of Leipzig. (See §§ 20 to 26.)
2. The permanent support of the unmarried legitimate and legitimized daughters and sons, unable to make a living, of deceased members, and over 18 years of age, in so far as they may not be entitled up to the completion of the twenty-first year to the orphans' pension under the provision of § 15 of the revised statutes of the general widows and orphans' fund nor to that under § 9 of these statutes. (See § 27.)
3. Support in single benefits of relatives of deceased or seriously ill members in urgent need, due to that death or illness. (See §§ 29 to 31.)

§ 3. The payments of the auxiliary fund shall in their amount be independent of all payments from other funds to the same persons for the same purposes as those of the auxiliary fund.

The payments which may be due now or hereafter to the members of the auxiliary fund for the same above-named purposes shall not be stopped or reduced because of the payments from the auxiliary fund.

§ 4. The property of the auxiliary fund shall consist of—

1. The capital to be collected and its interest;
2. An annual contribution of 4,000 marks from the Knaups Institute as long as the revenues of the institute shall admit of a contribution to this amount;
3. An annual contribution of 500 marks from the alms fund;
4. The annual contributions of the members (§ 11).

§ 5. The auxiliary fund may receive advantageous gifts of every description.

If it receives gifts for stated objects (§ 2), the revenues from such capital shall be applied only to this object and the surplus shall be added to the capital for its increase.

The manner of using it shall be determined by the will of the donor, stated in writing with the transfer of the gift.

If such declaration is not made, then under § 23 the normal allowance shall be computed, which can be made on the basis of the gift, to those of the respective class entitled to allowance.

The pensions to be granted to the respective classes under these provisions shall be reducible only by the amount by which, on account of this increase, the pensions of the respective orphans under 18 years of age (above, § 2, No. 1) shall exceed the full widow's pension of the auxiliary fund and the full pension of the respective children over 18 years (above, § 2, No. 2) by the triple amount of the widows' pensions.

§ 6. The ministry of cultus and public instruction may add to the auxiliary fund new institutions that shall be established at the University of Leipzig for the benefit of any one of the purposes of the auxiliary fund named in § 2, and at the same time for the benefit of all of its members. Only the resources of these institutions shall continue to be applied to the purpose to which they are dedicated and in the manner prescribed therein.

§ 7. The property of the auxiliary fund shall be administered gratuitously by the accounts division of the university, under the provisions with reference to the administration of the property of the university agreed upon between the highest state authority and the university.

§ 8. The accounts division shall forthwith invest, with interest, all gifts made to the auxiliary fund, unless the opposite has been expressly ordered.

At the beginning of each new account year it shall add to the capital—

1. Ten per cent of the income of the past year from interest and from contributions of members.
2. All revenues from institutions not used during the past year for the purposes of the fund, in so far as they may not be needed for the payment of current expenses.

II. MEMBERS AND THEIR CONTRIBUTIONS.

§ 9. All professors who are members of the general widows and orphans' fund of the University of Leipzig shall in future, ex officio, be members of the auxiliary fund from the day of their entrance into the former.

The professors who may already hold membership in the general widows and orphans' fund on March 31, 1892, shall also become members of the auxiliary fund with April 1, 1892, in case they have declared to the rector, in writing, on or before April 30, 1892, their desire to join the auxiliary fund.

The first librarian of the university shall, under these statutes, be treated as an ordinary professor.

§ 10. The university secretary and the chief accountant (*Rentmeister*), the latter as statutory administrator of the property of the institution, may join the auxiliary fund. They shall notify the rector in writing of their entrance on or before April 30, 1892, and later on within three months after appointment.

§ 11. The ordinary professor shall pay 100 marks entrance fee and 100 marks annual contribution.

The extraordinary professors shall pay 60 marks entrance fee and 60 marks annual contribution.

For the payment of the annual contributions the accounts division shall deduct from the quarterly payments of salary for the ordinary professors 25 marks and for the extraordinary professors 15 marks and transfer this sum to the auxiliary fund.

Those professors and officials who on or before March 31, 1892, are already members of the general widows and orphans' fund, also the chief accountant (*Rentmeister*) in office at the time, shall pay no entrance fee.

No paid fees or contributions shall be returned.

§ 12. In rights and duties the ordinary honorary professors and the above-mentioned extraordinary professors (§ 10) shall occupy under these statutes the same position.

III. THE EXECUTIVE COMMITTEE.

§ 13. The executive committee shall consist of—

1. The rector as president;
2. The prorector;
3. A professor selected by the senate as permanent member, who declares his willingness to make the probability computations necessary for the administration of the auxiliary fund, especially with reference to revision of funds.
4. Four ordinary professors elected by the ordinary professors of each faculty from their midst; and
5. Two extraordinary professors of the several faculties elected from their midst for five years interchangeably in turn by the extraordinary professors of the theological, the juridical, the medical, and the philosophical faculties, who shall be members of the fund.

Every two years and six months the term of office of half of the elected members shall end.

It shall be decided by lot whose term shall end on July 1, 1894.

The ordinary professors whose terms ended may be reelected.

§ 14. If a member of the executive committee vacates membership before expiration of the five years, the faculty to which he belongs shall elect a substitute for the remainder of the five years.

§ 15. The executive committee shall make its decisions by simple majority. In cases of a tie vote, the vote of the president shall decide.

Four members shall constitute a quorum.

It shall be competent to pass resolutions concerning the use of the resources of the institution for the purposes of the institution.

The president shall represent the fund both in and out of court.

§ 16. Any member of the fund who considers himself injured in his rights by any provision of the executive committee may appeal to the senate.

The execution of the contested provision shall then be held in abeyance until final decision.

Further appeal against the decisions of the senate may be made to the ministry of cultus and public instruction.

§ 17. The accounts division shall pay pensions and benefits only upon the order of the executive committee.

It shall at all times furnish information to the executive committee as to the status of the fund.

In February of each new business year it shall submit to the committee an account of receipts and expenditures of the fund during the past year and of the status of the fund for its inspection and eventual approval, and shall remit a copy of this account for the archives of the auxiliary fund.

§ 18. In March of each new business year the executive committee shall make report to the senate as to its activity during the past year and shall inclose with its report a copy of the account of the accounts division.

The senate forthwith shall submit this report to the ministry of cultus and public instruction.

§ 19. In July of each fifth business year the rector shall order a revision of the auxiliary fund and shall request the mathematical member of the executive committee to make the computations as to the normal amount of pension (see below, § 23). As to the nature and result of this revision the executive committee shall report to the senate not later than November of each fifth business year.

IV. CLAIMS AGAINST THE FUND, THEIR AMOUNT, AND NOTIFICATION THEREON.

§ 20. The same widows and orphans of persons deceased as members of the auxiliary fund to whom the general widows and orphans' fund of the university owes pension shall also have claim to pension against the auxiliary fund.

The claims shall begin on the same day and shall continue, respectively, as long as the corresponding claims of the same persons against the general widows and orphans' fund (see statutes of the same, §§ 11 and 13).

The first installment of the widows and orphans' pensions shall not be due until June 1, 1893.

§ 21. All the widows of ordinary professors shall have claim to equal pensions. The same shall apply, respectively, to the widows of extraordinary professors. The pension for the widow of an ordinary professor shall in its amount bear to that of the widow of an extraordinary professor the ratio of 3 : 2.

§ 22. The numerical amount of these pensions shall be determined by the executive committee every five years on the basis of the revision of the auxiliary fund and renewed computation of the normal amount of pension for the fund. The decision, if it increases or reduces the former amount of the claims, shall be made known to those entitled to payment.

§ 23. The amount of the pension is normal if it is not above nor below the permanent solvency of the fund; if, therefore, in view of the subsequently increasing number of claimants, it can not be increased, and in spite of this increase in the number of claimants will not have to be reduced later on.

§ 24. All persons entitled to pension will be compelled to accept a reduction if the next revision shows that the normal amount had heretofore been taken too high.

§ 25. Provisionally, and until the first revision of the fund, the pension of the widow of an ordinary professor shall be fixed at 300 marks, that of the widow of an extraordinary professor at 200 marks.

§ 26. Each legitimate or legitimized child, under 18 years, of a deceased member shall receive two-fifths of the statutory widow's pension (see above, §§ 21, 22, 25).

The academic senate may, on motion of the mother or of the guardian, extend, in case of need, the orphan's pension of the son of a deceased member until the completion of the twenty-first year of life.

Grandchildren and illegitimate, adopted, and stepchildren shall receive no pensions.

§ 27. Each legitimate or legitimized daughter, over 18 years old, of a deceased member shall receive, as long as she is unmarried and her mother is still living, three-fifths of the statutory widow's pension; after her mother's death, five-fifths. Just as much shall be paid to a legitimate or legitimized son, over 18 years old, of a deceased member who (the son) is permanently unable to earn a living.

These payments shall begin in all cases only after extinction of the claim of the respective child to the orphan's pension (see above, § 2, No. 2).

The payment of these pensions for children over 18 years old shall, however, begin only when the fund shall have accumulated a capital of 30,000 marks, unless gifts shall have been made previously for this purpose.

§ 28. Claims to widows and orphans' pensions may be withdrawn in favor of the fund, but not in favor of other persons entitled to pension.

§ 29. For single benefits to relatives of deceased sick members, which relatives may be in condition of acute need caused by such death or sickness, not more than 1,500 marks shall be used annually.

Only those relatives shall have claim to such benefits to whom the deceased or sick member shall have been provider and who at the same time belonged to his family.

§ 30. The single benefit granted to the family of a member in such necessity shall not exceed 500 marks.

Before granting the benefit, the executive committee shall carefully investigate whether actual sudden necessity exists.

This benefit shall not become a simple contribution to the expenses of burial and sickness.

§ 31. A repetition of such benefit in the following business year shall be admissible only in cases of extreme necessity; a second repetition, however, is absolutely prohibited.

§ 32. The executive committee shall be notified in writing of all claims on the auxiliary fund within three months after their origin. Without such notice the fund shall pay neither pension nor benefit, and in the event of belated notice the pension shall begin only with the day of notice.

V. AMENDMENTS OF THE STATUTES.

§ 33. These statutes can be amended only by resolution of the academic senate and with the approval of the ministry of cultus and public instruction.

The executive committee of the auxiliary fund shall be competent to move amendments with the senate. It shall be heard before decision on the part of the senate, in case the motion for amendment of the statutes was made by a member of the senate itself.

VI. DAY WHEN THESE STATUTES SHALL TAKE EFFECT.

§ 34. These statutes for the auxiliary and daughters' fund of the University of Leipzig shall take effect on April 1, 1892.

2. THE PENSIONING OF THE WIDOWS AND ORPHANS OF THE OFFICIALS AND SUBOFFICIALS.^a

A. THE WIDOWS AND ORPHANS OF OFFICIALS.

The pensioning of the widows and orphans of officials of the university is regulated by §§ 63 and 64 of the revised statutes for the University of Leipzig, approved under date of April 29, 1892, by the royal ministry of religion and public instruction.

These paragraphs are as follows:

§ 63. The pension of the widow of an official of the university shall be one-fifth of the service income on which his own service pension is to be based.

Each legitimate or legitimized orphan of such official shall receive, until the completion of the eighteenth year of life and as long as the mother is living, one-fifth of the widow's pension; after her death, three-tenths.

If the deceased was at the same time professor, his widow and his orphans shall receive only the pension under the revised statutes for the university widows and orphans' fund, unless the pensions claimable on the basis of the salary of the official should be more favorable for them. In the latter event the pensions that would be due from the university widows and orphans' fund shall be paid from this fund, and only the excess from the fund designated under § 64.

These claims to pensions shall begin on the same day as for professors' widows and orphans. (Revised statutes for the general widows and orphans' fund of the University of Leipzig, § 11.)

For the remainder there shall be applied to them §§ 39, 40, 42, 43 (subpars. 4 and 6), 44, 46, and 51 of the law of March 7, 1835, concerning the status of civil state officials; § 1 of the law of April 9, 1872, concerning the amendment of certain legal provisions for the pensions of state officials and their relicts; §§ 36, 48, and 49 of the law of June 13, 1876, concerning certain amendments of the legal provisions for the status of civil state officials.

§ 64. The pensions of §§ 62 and 63 shall be paid by the exchequer of the university (compare, however, § 63, subpar. 3).

The statutory provisions referred to in the above § 63, subparagraph 5, are as follows:

(a) *Law concerning the status of civil state officials, March 7, 1835.*

§ 39. Support of these relicts from state funds shall not be granted for widows and orphans—

- (a) If the state official without service pension has resigned voluntarily or has been discharged or dismissed.
- (b) If at the time of his decease he was under investigation for a breach of duty (*Vergehen*), or if, after his death and before decision has been reached concerning a pension for the relicts, incriminating facts against him are found and he would have been subject in both cases to the loss of his salary or *wartegeld* or service pension.
- (c) Because of unworthiness of the relicts, if they themselves have suffered detention in a penitentiary or institution of correction, or have repeatedly suffered punishment by the police for immoral conduct.

Investigation and decision in cases (b) and (c) belongs to the appointing authority.

^a Under § 59 of the revised statutes of the University of Leipzig the following are officials (*Beamte*) of the university: The first librarian and the librarians and custodians of the university library; further, the secretary of the university and the questor; finally, the organist of the university church.

Under § 66 of the same statutes the following are subofficials of the university: The messengers of the secretary's office, the bedels and the constable, the inspector of the refectory, the forester of the university, and the cantor of the university church.

If the relicts feel that they can not submit to the decision, they may bring suit for pension—

(d) If the marriage from which the widow or the children derive their claim was concluded only during the last sickness of the state official.

For widows: If at the time of the decease of the official, divorce, annulment, or permanent separation from bed and board had been decreed.

For children: If they were not born legitimately of the first degree.

More distant descendants are, therefore, excluded—e. g., grandchildren, etc.; children of a first marriage; adopted; illegitimate children.

Children legitimized by a subsequent marriage shall be treated the same as the legitimately born, if the legitimation or marriage had not been deferred to the last sickness.

The possession of private property or support to be derived by the relicts from other pension institutions or from other state funds shall have no influence.

§ 40. As a gratuity, the widow and children of an official who died while in active service or entitled to *wartegeld* shall draw, under the limitations of § 39, his salary or *wartegeld*, as a rule, for a month in addition to the month of death. The government, however, may grant such gratuity for three months if the conditions of the service are such that a transfer to the position can not be accomplished for that time without difficulties and expense for the administration. With officials drawing service pension no gratuity shall be granted.

In so far as the service income consists wholly or in part of incidental and undefined payments, it rests wholly with the judgment of the appointing authority whether it—

1. Will leave these to the relicts and, if necessary, arrange at their expense for temporary substitutes or allow the heirs in appropriate cases to continue the service; or

2. Will grant them the entire amount of those emoluments settled upon as salary or appointment, with complete abrogation of the relation.

The allowance of an interim salary for the successor in the position of service during the period of gratuity is left to the judgment of the state authority.

§ 42. Not entitled to pension are the following:

- (a) The relicts derived from the marriage contracted by an emerited state official while drawing service pension.

- (b) A widow who is by twenty-five years younger than her deceased husband, if he married her after his completed sixty-fifth year of life. This provision, however, shall have no application to such marriages concluded before the publication of this law.

- (c) Children who have already completed the eighteenth year of life.

- (d) The relicts of those pensioned state officials who refuse to submit to the reductions ordered in § 47.

If, however, unmarried daughters or invalid sons of a deceased state official, even after the completed eighteenth year, should be unable to earn a living and without means and also without relatives to afford them support, the state authority may, although wholly on its judgment and without establishing a claim thereto, allow them, even beyond the eighteenth year, suitable support.

§ 43. If the state official leaves children of successive marriages, the children of the first marriage shall at once receive the three-tenths for each child, even if their stepmother draws a pension.

In cases of very special need of the relicts of a state official, the state government shall have the right to grant a pension greater than the statutory one, which, however, shall not exceed the latter by more than its fourth part.

§ 44. The right to pension shall begin—

- (a) If the relicts are entitled to the gratuity payment with the first month after expiration of the gratuity month.

- (b) If the deceased himself drew service pension with the month following his death.

§ 46. (A) The widows' and orphans' pension shall cease—

- (1) With the death of each participant. The right to an increase on the part of the remaining participants does not exist, excepting the increase of pension for children when their mother dies (§ 43).

- (2) In consequence of repeated punishment by the police for immoral conduct or in consequence of detention in the penitentiary or in a house of correction.

(B) The pension of a widow shall cease especially also with her remarriage and shall not be restored if this marriage should be annulled or wholly dis-

solved. If, however, her second husband is also a state official and also dies before her, she shall have new claim to pension as widow of her second husband.

If the widow assumes a function with salary in the public service or in the service of the royal court, the amount of this salary shall be deducted from her pension as long as she continues in that function.

(C) The pension of the children shall cease:

(1) With completion of the eighteenth year of life. (Compare, however, § 42.)

(2) On their being provided for at an earlier time, and marriage on the part of daughters.

To what extent the pension shall continue if the relicts are settled in a state institution for education or support shall be determined in each individual case.

On leaving such institution these shall again be paid their pensions.

With reference to failure to collect for two years, the provisions of § 36 shall apply.

§ 51. Lawsuit can not be brought against the fiscus or the state authority on account of the decisions and orders of the authorities which are left to their judgment in this law, in so far as such legal proceeding is not expressly reserved (§ 30 and 39).

(b) *Law of April 9, 1872, concerning the amendment of certain provisions referring to the pensions of state officials and their relicts.*

§ 1. The pension of the widow of a state official shall be the fifth part of the service income which the deceased last drew in actual service, even if at the time of his decease he was under *wartegeld* or service pension.

The lowest amount of a widow's pension shall be 20 thalers; that of a child's pension 10 thalers, and the lowest amount of a fatherless and motherless orphan 15 thalers.

The above provisions shall apply from the day on which this law shall take effect; also to those statutory pensions of relicts (widows and orphans) of previously deceased state officials, which (pensions) had become due before the time named.

On the other hand, its application to the increments of pensions designated in the last subparagraph of § 43 shall depend on a special decision by the state government.

(c) *Law of June 3, 1876, referring to certain amendments of the statutory provisions concerning the status of civil state officials.*

§ 36. After the death of a state official dismissed from his office, his relicts shall have claim to pension only if the deceased had been dismissed with allowance of a pension of the kind mentioned above.

§ 48. In the absence of relicts, as designated in § 40 of the law of March 7, 1835, the gratuity (*Gnadengenuß*) may be granted, even if the deceased has left in destitution legitimate progeny of the second or further removed degrees, parents, brothers or sisters, nephews or nieces, or foster children to whom he had been provider, or if his estate is not sufficient to cover the expenses of the last sickness or of burial.

§ 49. To whom payment of the gratuity shall be made shall be decided in each case by the respective superior service authority.

The gratuity shall not be subject to attachment.

B. THE WIDOWS AND ORPHANS OF THE SUBOFFICIALS.

For the relicts of the male and female subofficials and servants who are not State officials, employed on fixed annual salary at the university, its faculties and institutions, provision is made by the following fund established at the university:

Pension fund for the subofficials and servants of the University of Leipzig, its faculties and institutions.

The statutes of this pension fund, approved by the royal ministry of cultus and public instruction under date of April 29, 1892, are as follows:

§ 1. The pension fund established at the University of Leipzig for its subofficials and servants is an institution with juridical personality, as defined by the law concerning juridical persons of July 15, 1868, § 6a.

§ 2. The fund shall be managed gratuitously by the accounts division (*rentant*) of the university, under supervision of the academic senate, to which annual report of the management shall be made.

§ 3. The fund shall be represented by the rector (or his representative) who eventually shall also take the necessary oaths in its behalf.

§ 4. The fund may receive advantageous gifts of every description. These shall forthwith after receipt be invested on interest, and the interest shall forthwith be used according to § 5, unless the gift shall make different provision.

§ 5. The fund has at its disposal for the purposes of the institution—

1. The interest of the capital.

2. An annual contribution of 2,000 marks from the Knaups institution.

3. An annual contribution of 500 marks from the alms fund of the university.

§ 6. If the resources designated in §§ 4 and 5 shall not be sufficient to meet the obligations of the fund the deficit shall be covered by the exchequer of the university.

§ 7. All male and female subofficials and servants who are not state officials, employed with fixed annual salary at the university, its faculty and institutions are entitled to claim a pension from this fund.

§ 8. The pension shall be for life. It shall begin with the end of the month in which the pension has been allowed. It shall cease with the end of the month in which the pensioner has died. It shall be paid monthly in advance. The installment which shall remain uncollected a year after the day it may be due shall be forfeited to the fund.

§ 9. An official or servant, whether he or she requests discharge voluntarily or receives it against his or her will from the appointing authority, can claim the pension if he or she—

(a) has served for twenty-five years and at the same time is 65 years of age;

(b) has served at least ten years and is at the same time 70 years of age;

(c) has served at least ten years and has become permanently incapacitated for service, without his or her fault, by age, sickness, or bodily injury;

(d) has served less than ten years and has been permanently incapacitated for service, without his or her fault, in the performance of his or her service.

§ 10. An official or servant who has served less than ten years and who has been permanently incapacitated for service without his or her fault, shall be allowed, even if he or she has not been incapacitated in the performance of his or her service, or his or her discharge, in case of destitution, by the academic senate, with the approval of the ministry, a gratuity for life, which, however, shall not exceed the lowest pension rate. (See below § 12.)

§ 11. The amount of the pension shall be determined by the service income which the claimant actually drew for one year before being pensioned.

As service income shall be considered the fixed salary, eventual service residence, free board or the money equivalent allowed therefor, and all other remunerations whose value or amount shall have been fixed on appointment, or in so far as this may not have been done with already appointed officials or servants, by the academic senate, the final determination shall be subject to the approval of the ministry.

§ 12. The pension shall carry—

Per cent.

Before the completed fifteenth year of service-----	30
After the completed fifteenth but before the completed sixteenth year of service -----	31
After the completed sixteenth but before the completed seventeenth year of service -----	32
After the completed seventeenth but before the completed eighteenth year of service -----	34
After the completed eighteenth but before the completed nineteenth year of service -----	36
After the completed nineteenth but before the completed twentieth year of service -----	38
After the completed twentieth but before the completed twenty-first year of service -----	40
After the completed twenty-first but before the completed twenty-second year of service-----	42
After the completed twenty-second but before the completed twenty-third year of service-----	44

	Per cent.
After the completed twenty-third but before the completed twenty-fourth year of service-----	46
After the completed twenty-fourth but before the completed twenty-fifth year of service-----	48
After the completed twenty-fifth but before the completed twenty-sixth year of service-----	51
After the completed twenty-sixth but before the completed twenty-seventh year of service-----	54
After the completed twenty-seventh but before the completed twenty-eighth year of service-----	57
After the completed twenty-eighth but before the completed twenty-ninth year of service-----	60
After the completed twenty-ninth but before the completed thirtieth year of service-----	63
After the completed thirtieth but before the completed thirty-first year of service-----	66
After the completed thirty-first but before the completed thirty-second year of service-----	69
After the completed thirty-second but before the completed thirty-third year of service-----	71
After the completed thirty-third but before the completed thirty-fourth year of service-----	73
After the completed thirty-fourth but before the completed thirty-fifth year of service-----	76
After the completed thirty-fifth but before the completed thirty-sixth year of service-----	75
After the completed thirty-sixth but before the completed thirty-seventh year of service-----	77
After the completed thirty-seventh but before the completed thirty-eighth year of service-----	78
After the completed thirty-eighth but before the completed thirty-ninth year of service-----	79
After the completed thirty-ninth but before the completed fortieth year of service and over-----	80

In the event of proved gross fault in the performance of service the discharged person, unless he or she shall have completed the fortieth year of service or the sixty-fifth year of life, shall be allowed only one-half the pension otherwise due.

With regard to the computation of time of service and the enjoyment of the pension in foreign parts, §§ 43, 44, and 45 of the law of June 3, 1876, shall, respectively, apply.

§ 13. The claim to pension becomes extinct for the official or servant still in service if he or she—

1. Is discharged or resigns voluntarily before having acquired title to pension;
2. Has been sentenced by legally valid judgment to at least three months of imprisonment or has been declared to be subject to police supervision.

§ 14. A pensioner loses claim to pension—

1. By expressed or tacit renunciation (as such shall be regarded also permanent failure to collect the pension for three years);
2. By acceptance of some other appointment with fixed salary (in this event, however, only to the extent of the sum derived from such appointment);
3. By refusal to accept a new appointment, corresponding with his former occupation, in the university, one of its faculties, or one of its institutions, provided the pensioner has again become able for service before completion of the sixty-fifth year of life, and provided the new position affords the same salary as the former one;
4. By legally valid sentence, as indicated in § 13, No. 2.

§ 15. The widow and the surviving children of officials and servants designated in § 7 shall have claim to pension even if the deceased at the time of his death was not yet pensioned or entitled to pension.

§ 16. The annual pension of a widow shall carry one-fifth of the service

income drawn by her husband at the time of his death or at the time of his being pensioned.

Each child shall receive, if and as long as the mother draws pension, one-fifth, and if she is not entitled to pension (§ 18, under 1 *a* and 2) or has ceased to draw pension (§ 19, 1 *a*, *b*, *c*, and 2), three-tenths of the widow's pension. If there are children of the officer or servant from more than one marriage, the children from the earlier marriage shall receive three-tenths, even if the step-mother, too, draws pension.

To these pensions, too, the provision of § 45 of the law of June 3, 1876, shall apply.

§ 17. Enjoyment of the pensions of widows and orphans shall begin with the end of the month in which the death of the official or servant took place.

With reference to the payment of pensions and to the forfeiture of uncollected installments, § 8 shall apply.

§ 18. The relicts shall receive no pension support :

1. With widows and children—

(*a*) Because of unworthiness of the relicts, if they themselves have been legally sentenced to one of the penalties designated in § 13, under No. 2, or to imprisonment, under § 361, No. 6, of the Imperial Code of Penal Laws.^a

(*b*) If the marriage from which the relicts derive their claim has been concluded by the official or servant after completion of the sixtieth year of life with a woman more than thirty years his junior, or if it was concluded only during the last sickness of the official or servant or after his being pensioned.

2. With widows, if at the time of the death of the official or servant the decree of divorce or the annulment of the marriage had been issued.

3. With children :

(*a*) If they were begotten out of marriage, unless they were legitimized by subsequent marriage, but not by marriage concluded during the last sickness of the official or servant.

(*b*) If they are derived from a marriage concluded by the official or servant after his being pensioned.

(*c*) If, at the time of the death of the official or servant, they have already completed the eighteenth year of life, or

(*d*) Are already married at this time.

§ 19. The claim to pension of relicts shall cease :

1. With widows and children—

(*a*) On account of unworthiness of the person entitled to pension ; if he (or she) has been legally sentenced to one of the penalties indicated in § 13 under No. 2, or to imprisonment under § 361, No. 6, of the Imperial Code of Penal Laws.

(*b*) In consequence of expressed or tacit renunciation, with regard to which the provision of § 14, under No. 1, shall apply.

(*c*) With the end of the month in which the person entitled to pension shall die.

2. With widows, if they marry again, in which case the divorce or annulment of the other marriage shall furnish no claim to return into the enjoyment of pension.

3. With children.

(*a*) With the completed eighteenth year of life.

(*b*) With marriage on part of daughters.

§ 20. All admissible amendments of these statutes, whether they require legal approval or not, shall be obligatory at once for all participants of the pension fund from the day on which they shall acquire legal effect.

§ 21. The revised statutes :

1. Shall not apply to the subofficials and servants who were already pensioned before April 1, 1892.

2. Shall apply to the widows and orphans whose pension claims had already been acquired before April 1, 1892.

^a Paragraph 361, No. 6, of the Imperial Code of Penal Laws, is as follows :

"With imprisonment shall be punished : (*b*) A female who on account of professional prostitution has been placed under police supervision, if she acts in violation of the police regulations decreed in behalf of health, public order, and public decency, or who carries on professional prostitution without being placed under such police supervision."

§ 21. The revised statutes—Continued.

3. Shall apply to the subofficials and servants who shall be members of the fund on April 1, 1892, and to their future widows and orphans, if those members of the fund shall have resigned for themselves and their relatives the rights acquired under the previous statutes on or before April 15, 1892. If such resignation is not made or not delivered at the proper time the previous statutes shall apply to their pensions and to the pensions of their relatives.

CONCLUDING PROVISION.

The revised statutes shall take effect on April 1, 1892.

[From Gesetz- und Verordnungsblatt (Law and Regulation Annual) for the Kingdom of Saxony, Dresden, 1876, pp. 247-250.]

§ 38. The annual pension to which a state official may lay claim shall be computed in accordance with the service income which he actually drew during a year before the time of his pensioning, to be determined under § 10 of the law of March 7, 1835 (p. 169 ff of the Law and Regulation Annual of 1835).

The annual pension shall carry: After completed tenth, but before completed fifteenth, year of service, 30 per cent; after completed fifteenth, but before completed sixteenth, year of service, 31 per cent (for remainder see pp. 205-6 of this translation) of the service income determined under the above provision.

If the service income of a state official to be considered in the computation of the pension exceeds 12,000 marks, only one-half of the excess shall be considered in the computation.

§ 39. On account of unfortunate accidents suffered in the service, or if the amount of pension does not exceed 2,000 marks, in existing urgent necessity an increase of the statutory pension may take place. This increase, however, shall not exceed eight one-hundredths of the service income on which the pension was computed.

§ 40. The completed first day of the last service-pension month furnishes to the heirs and creditors of the pensioned state official claim to the entire monthly amount.

§ 41. The service pension shall be extinguished or suspended in so far as the pensioner, through some other appointment in the public service or by accepting a position in the executive board, the board of managers, or directors of an association for profit, shall acquire an income or a new pension which, together with his first pension, shall exceed his previous service income.

§ 42. Pensioned former state officials shall be subject to the statutory contributions to the state pension fund only as long as they may have pensionable wives or children.

§ 43. If the beginning of the time of service is not stated in the decree of appointment, it shall as a rule be counted from the day on which the state official was first obligated in a position expressly connected with state service, unless special circumstances, e. g., delay of the act of obligation without his fault, shall justify an exception.

The first two years of service, during which the appointment was only revocable, shall be added to the time of service.

§ 44. In fixing the time of service, the time may be brought into the computation during which the respective state official was engaged in some practical occupation which by custom or express regulation served as preparation for an office in the state service, or during which he held a public office not to be treated under § 1 of the law of March 7, 1835, including that of an attorney and of a notary. Such additions assume, however, in so far as the combined ministry (*Gesamt Ministerium*) has not expressly granted an exception, the subsequent payment of the annual contributions to the pension fund of the state prescribed in § 47 of the law of March 7, 1835.

The deductions in question shall be computed in accordance with the amount of the fixed income of the respective state official during the time to be credited, but in default of this in accordance with the first regular service income.

In appointments in the state service, the appointing authority may make provision in advance as to the computation of the time of service of the appointee.

§ 45. Whosoever in future makes his principal residence in foreign parts shall suffer, if the pension accorded to him exceeds 600 marks, a deduction of 10 per cent, unless he has been permitted as a favor the full enjoyment of the pension in foreign parts or there exists a special treaty with the respective foreign

government concerning the right of emigration with regard to the consumption of a pension in foreign parts.

By foreign parts there are to be understood here, as in §§ 19 and 36 of the law of March 7, 1835, all states not belonging to the German Empire.

§ 46. State officials appointed before October 15, 1848, shall retain the eventually more favorable pension claims due them under the law of March 7, 1835, with reference to part of their service income already drawn up to this time.

The pensions of officials who, at the time of the promulgation of the present law, are already pensioned shall suffer no change thereby.

§ 47. If a pensioned former state official has been sentenced to imprisonment on account of a crime committed before or after his being pensioned, or on account of a previous or subsequent misdemeanor for which he can be sentenced to loss of the right to hold public office or under the provisions of § 32, subpar. 1, of the Imperial Code of Penal Law, to loss of civil rights of honor, he can be deprived of his pension.

The sentence of loss of pension shall proceed from the disciplinary court (*Disziplinargericht*) and shall result for the sentenced individual in the loss of the title and rank which may have been left to him when he was pensioned. The proceeding is prescribed in §§ 20 to 30.

In case of conviction the provisions of § 35, subpar. 2, shall respectively apply.

The withdrawal of title and rank may be decreed against a pensioner by the ministry under which he was last employed, before being pensioned in every case, if the pensioner in his conduct shows himself unworthy of public esteem.

Before such decree the pensioner shall be given opportunity to present whatever may serve his justification or excuse.

Against the decree of the respective ministry appeal may be made to the joint ministry (*Gesamt Ministerium*).

§ 48. In the absence of the relicts designated in § 40 of the law of March 7, 1835, the gratuity (*Gnadengenuss*) may be granted also if the deceased leaves in destitution legitimate progeny of the second or more remote degrees, parents, brothers or sisters, nephews or nieces, or foster children whose provider he was, or if his estate is not sufficient to pay the expenses of the last sickness or of the burial.

§ 49. To whom payment of the gratuity shall be made shall be determined in each individual case by the respective superior official authority.

The gratuity can not become subject to attachment.

Given at Dresden on June 3, 1876.

VI. THE UNIVERSITIES OF THE GRAND DUCHY OF BADEN.

A.—PENSIONING THE WIDOWS AND ORPHANS OF TEACHERS AND OFFICIALS.

The pensioning of the widows and orphans of teachers and officials at the two universities, Heidelberg and Freiburg in Baden, is regulated by the law for officials of July 24, 1888, which applies to all officials of the Grand Duchy of Baden (Jl. of Laws and Regulations (*Gesetz- u. Verordnungsblatt*), 1888, No. XXXIV).

Under this each widow of a regularly appointed official and also the widow of each regular teacher or official of the universities of Heidelberg and Freiburg in Baden, who has earned a claim to service pension or has died in consequence of some disease, wound, or other injury contracted in the exercise of or occasioned by his service without any fault of his, receives a pension of 30 per cent of the determining estimate of income of her deceased husband.

The statutory orphan's pension carries:

- (a) For children whose mother is living and entitled to the payment of widow's pension at the time of the death of the teacher or official of the university, two-tenths of the widow's pension for each child;
- (b) For children whose mother is no longer living or who was not entitled to the payment of a widow's pension at the time of the death of the official: If there is only one such child, four-tenths; if there are two such children, seven-tenths; if there are three or more such children, for each of them three-tenths of the widow's pension.

Under certain conditions the statutory pension amounts are paid also to the relicts of a teacher or official deceased in a nonstatutory position or retired therefrom with service pension.

In return for these pension claims of their relicts the teachers and officials of the universities, as well as all other State officials, have to pay, as a rule, into the widows' fund of the officials 3 per cent of the determining estimate of their income, respectively, of their service pension (*Ruhegehalt*).

The detailed provisions concerning the pensions of relicts are contained in the fifth and sixth sections of the above-mentioned law of July 24, 1888, of which §§ 55 to 88, referring to this, are as follows:

Fifth section: Pensions of relicts.

I. PENSION AT DEATH (STERBEGEHALT).

§ 55. *Claim to pension at death in general.*—The relicts of a regular official shall receive as *Sterbegehalt* for the three months succeeding the day of death the full amount of salary and rent money drawn by the official and of the supplementary salary eventually allowed for the chief service.

From variable incomes and incomes in kind, a *Sterbegehalt* shall be granted only if the function has occupied the whole time and energy of the official and only in so far as such allowances are included in the estimate of income (§ 18).^a If the official enjoyed free residence, the *Sterbegehalt* shall be paid from the item of rent money of the respective local fund.

The relicts of an official who at the time of his death drew service pension shall receive as *Sterbegehalt* the amount of the service pension for three months.

§ 56. *Relicts entitled and competent to draw pensions.*—As relicts in the sense of the preceding paragraph shall be considered the widow and the legitimate children of the official.

In the absence of relicts entitled to claims, the *Sterbegehalt* may be granted wholly or in part, nevertheless, if the deceased has left in destitution parents, grandparents, brothers or sisters, nephews or nieces, adopted children, stepchildren, or foster children whose provider he was, or if the estate is not sufficient to meet the expenses of the last sickness and burial.

§ 57. *Optional Sterbegehalt.*—The relatives of a nonstatutory official, as designated in § 56, subparagraph 1, whose function shall have required his entire time and energy, may be granted a *Sterbegehalt* of one monthly installment of the service income, service pension, or gratuity pension of the official at their request, if the conditions under subparagraph 2 of § 56 exist.

§ 58. *Decision as to the granting of Sterbegehalt.*—As to the question to whom the payment of the *Sterbegehalt* can be legally paid and how it shall be divided among several persons entitled to payment or respective participants under § 56, subparagraph 2, and § 57, the order of the respectively competent ministry shall decide with exclusion of recourse to law.

II. RELICTS' PENSIONS.

§ 59. *The claims of the relicts to pension.*—The relicts of a statutory official shall receive in the event of the death of the official after this law shall take effect, pensions—widows' pensions, orphans' pensions (*Wittwengeld, Waisengeld*)—in accordance with the following provisions:

§ 60. *Persons entitled to claims.*—As relicts in the sense of the preceding paragraph shall be considered the widow, as long as she is not married, and the legitimate unmarried children of the official until the completed eighteenth year of life.

The widow and the surviving children of an official from a marriage con-

^a § 18 of the law of July 24 is as follows:

For the determination of service pensions, gratuity pensions, and widows' pensions, as well as of the contributions to the widows' fund by statutory officials, the estimate of income shall serve as basis.

The estimate of income shall be composed, as to the kind of payments due the officials, as follows:

1. The amount of salary allowed the official (§ 17, No. 1).
2. The estimated amount of rent money (*Wohnungsgeld*) § 17, No. 1, and § 24.
3. The regulated estimate of value for variable payments (§ 17, No. 4.)
4. The regulated estimate of value of payments in kind (§ 17, No. 5).

cluded after his retirement shall have no claim to pension, except in case of temporary retirement (§§ 32 and 33).^a

The widow shall have no claim to widow's pension, if her marriage with the deceased was concluded at a time when his life was in serious danger from sickness, in so far as death ensued within three months after the conclusion of marriage.

§ 61. *The statutory widow's pension.*—Claim to the statutory widow's pension shall be held by the widow, if the statutory official died after earning a claim to retirement pension or in consequence of one of the causes indicated under § 34, subparagraph 2, No. 2.

The statutory widow's pension shall carry 30 per cent of the determining estimate of income (§ 18).

In the cases of §§ 63, 67, and 76, subparagraph 2, the estimate of the income shall decide which had been assumed until the death as a basis for the payment of the contribution to the widows' fund; in all other cases the regular estimate of all service payments which the official drew immediately before his death, respectively, before his retirement.

The amount of the estimate exceeding 10,000 marks shall in all cases be omitted from computation.

§ 62. *The statutory orphan's pension.*—Children shall have claim to the statutory orphan's pension under the provisions of § 61, subparagraph 1.

The statutory orphan's pension shall carry:

- (a) For children whose mother is still living and entitled to a widow's pension at the time of the official's death—two-tenths of the widow's pension for each child.
- (b) For children whose mother is no longer living or not entitled to the payment of a widow's pension at the time of the official's death—
if only one such child existed, four-tenths; if two such children existed, seven-tenths; if three or more such children existed, for each of them three-tenths of the widow's pension.

§ 63. *Exceptional claim of the relicts of a nonstatutory official to the statutory pension.*—The relicts of an official who died in nonstatutory (*nicht etatsmässig*) position or had been retired from such position with retirement pension, shall have claim to the lawful pension, if the official under the provisions of § 43,^b giving title to retirement pension has been transferred from a statutory position formerly occupied by him to the nonstatutory position, and has continued payment of the contribution to the widow's fund under § 73 until his death.

The claim shall not be valid for relicts derived from a marriage concluded after the transfer to the nonstatutory position.

§ 64. *Reduction of the pension.*—The total amount of the widow's and orphans' pension shall not exceed the retirement pension to the payment of which the official was entitled on the day of his death, respectively, would have been entitled under § 34, subparagraph 2, No. 2,^c in case of retirement.

^a §§ 32 and 33 of the law of July 24, 1888, are as follows:

"§ 32. The members of the highest state authority shall be competent at any time to be placed into temporary retirement and to request temporary retirement, even in the absence of the provisions of § 28, and without recourse to the proceedings indicated in §§ 29 to 31.

"§ 33. Statutory officials for whose employment in the public service there shall be no further occasion in consequence of some change in the organization of the authorities or their departments, furthermore for other solid reasons the diplomatic representatives, the directors and members of the ministries, the directors of the central-middle offices (*central mittelstellen*), the first state attorney (*oberstaatsanwalt*), and the officers of grand ducal privy council may be placed under temporary retirement, even in the absence of the provisions of § 28, and without recourse to the proceedings indicated in §§ 29 to 31."

^b § 43 of the law of July 24, 1888, is as follows:

"If an official, who has earned in a statutory position a legal claim to retirement pension in case of his retirement, is transferred to a nonstatutory (*nicht etatsmässig*) position, and later on is relieved, for one of the reasons given under § 28, Nos. 1 to 3, he shall have claim to a retirement pension computed on the basis of the last estimate of income of the statutory position and the time of service up to the time of such transfer."

For weighty reasons, however, he may be credited in the computation with the later time of service, wholly or in part.

There shall be no claim, if the transfer to the nonstatutory position has been made under one of the provisions of § 42, subparagraph 2.

^c § 34 of the law of July 24, 1888, is as follows:

"A statutory official, who may be retired after a time of service of at least ten years (comp. § 37 ff.), shall have claim to retirement pension for life under the following provisions, in so far as this retirement [was not caused?] by an affliction due to his own gross fault.

"Even with a time of service of less than ten years, there shall be claim to retirement pension, if the retirement was made:

- "1. Under §§ 32 and 33, or
- "2. On account of some disease, wound, or other injury, clearly brought upon the official in the exercise of his service or in consequence thereof without fault of his own."

In applying this limitation both the widows' and the orphans' pensions shall be proportionally reduced. If later on claims are withdrawn, the widows' and orphans' pension of the remaining claimants shall be proportionally increased within lawful limits with the beginning of the succeeding month.

§ 65. *Reduction of the widow's pension.*—If the widow is younger than the deceased official by thirty years or more, the widow's pension computed under the preceding paragraphs shall be reduced as follows:

With a difference in age of fully thirty to thirty-five years, by one-tenth;

With a difference of more than thirty-five but not over forty years, by two-tenths;

With a difference of more than forty years, by three-tenths.

Such reduction shall have no influence upon the amount of the orphans' pension (§§ 62, 64).

§ 66. *Limited widows' and orphans' pensions.*—The relicts shall have claim to limited pensions if—

1. An official died in a statutory position but before he had earned claim to retirement salary and in the absence of the conditions of § 34, subparagraph 2, No. 2, or if
2. A statutory official, who has been retired without claim to retirement salary, shall have continued payment of the contributions to the widows' fund, under § 74, until his death in retirement.

The limited pension shall carry 80, respectively 60, per cent of the amount to be computed under the preceding provisions, according to whether the official has the right to be credited with a time of service of at least five years or less than five years.

In this the amount of retirement salary admissible under § 45^a shall take the place of that designated in § 64, subparagraph 1.

§ 67. *Limited pension in case of relief from the state service.*—Claim to limited pension shall be due, furthermore, to the relicts of an official relieved from public service by whom the contributions to the widows' fund shall have been paid up to his death, if the official, after remaining at least ten years in the public service, voluntarily resigned from it for the purpose of assuming the office of first burgomaster (*Aberbürgermeister*) or burgomaster in the communal service of the home country or as registrar of real estate and mortgages in one of the cities under the city regulations and retained his claim to widows' and orphans' pensions in accordance with § 75.

§ 68. *Rounding (aufrundung) of contributions.*—Fractional parts, resulting from the computation of the yearly payments of a person entitled to pension, shall be counted as a full mark without prejudice to the provision of § 64.

§ 69. *Beginning and end of payment.*—Payment of pension shall begin after the end of the month following the month of death.

It shall end with the end of the month in which the claim to payment shall be extinguished.

III. CONTRIBUTION TO THE WIDOWS' FUND.

§ 70. *Obligation to the payment of contributions to the widows' fund.*—Every statutory official is under obligation to pay contributions to the widows' fund.

The contribution to the widows' fund shall be collected regularly in those periods of time in which the service income or the retirement salary is payable by retention of a corresponding part of these payments.

In order to cover the eventual nonpayment of contribution to the widows' fund at the death of an official, the *Sterbegehalt* and the next payable installments of the pensions shall be available.

§ 71. *Beginning of the obligation.*—The obligation of payment of the contribution to the widows' fund shall begin—

1. For those officials who, when this law shall take effect, shall be under statutory appointment, with just this time;
2. For officials who shall receive appointment later on, with the beginning of the month in which this appointment shall take effect.

§ 72. *Extinction of the obligation.*—The obligation of payment of the contribution to the widows' fund shall cease—

1. With the death of the official;

^a § 45 of the law of July 24, 1888, is as follows:

"If a statutory official who has no legal claim to retirement salary shall be retired under § 28, he may be allowed, in correspondence with the necessities existing in the personal conditions, a revocable retirement salary not exceeding 30 per cent of the estimate of income last fixed for computation."

§ 72. *Extinction of the obligation*—Continued.

2. With voluntary or involuntary relief from statutory appointment, with reservation of the provisions in §§ 73, 75;
3. With the retirement of an official without claim to retirement salary, with reservation of the provision of § 74;
4. With the retirement of an official, in so far as he is neither married nor has unmarried legitimate children under 18 years of age (§ 60); and
5. For retired officials on entrance into the condition indicated under No. 4—a marriage concluded after retirement or the presence of children from such marriage shall not prevent the extinction of the obligation.

The temporary retirement of an official (§§ 32 and 33) shall not entail the extinction of the obligation of payment of contribution to the widows' fund.

§ 73. *Payment of contributions to the widows' fund by nonstatutory officials.*—If a statutory official, who either is married or has unmarried legitimate children under 18 years of age (§ 60), is transferred to a nonstatutory position under the conditions of § 43 conferring title to retirement salary, he can retain the claim to widows' pension by obligating himself to the continuance of payment of his previous contributions to the widows' fund.

The declaration that the official will avail himself of this privilege shall be made within a term of three months from his entrance upon the nonstatutory position, on penalty of loss of this privilege.

The official may at any time give up the claim to pension thus retained, and shall thereby be relieved of the obligation of payment of contribution to the widows' fund. If in spite of repeated requests the contributions remain unpaid for a period of at least six months, this fact may be considered as renunciation of the claim.

Besides, the payment of contributions shall cease in every case if the official no longer has relatives entitled to pension from a marriage concluded before relief from the statutory position.

§ 74. *Payment of the contribution to the widows' fund by officials who may have been retired without claim to retirement.*—If a statutory official who either is married or has unmarried legitimate children under 18 years (§ 60) is retired without claim to retirement salary, he can retain the claim to widows' pension by obligating himself to continuance of payment of 80 per cent, respectively 60 per cent, of his previous contribution to the widows' fund, according to the incidence of one of the conditions indicated in § 66, subparagraph 2.

The provisions of § 73, subparagraphs 2 and 3, apply to this case, respectively. Payment of contribution shall cease if the official no longer has relatives entitled to pension from a marriage concluded before his retirement.

§ 75. *Payment of contributions to the widows' fund by officials voluntarily relieved.*—If a statutory official who either is married or has unmarried children under 18 years (§ 60) withdraws voluntarily from the service, he may retain his title to widows' pension by obligating himself to the continuance of payment of the contribution to the widows' fund, determined on the basis of the estimate of income at the time of his withdrawal.

The claim shall be valid only for the relicts from a marriage concluded before withdrawal. The retention of the claim is not admissible, if the withdrawing official, by virtue of the service into which he may pass from the state service, shall acquire for his relicts a claim to widows' pension.

The provisions of § 73, subparagraphs 2 and 4, apply to this case, respectively.

§ 76. *Amount of the contribution to the widows' fund from officials in office.*—As long as the official draws his service income, the amount of his contribution to the widows' fund shall be 3 per cent of the determining estimate of income (§ 18).

If an official, under the conditions of § 42 leading to the computation of a higher estimate of income,^a has been transferred to a position with lower esti-

^a § 42 of the law of July 24, 1888, is as follows:

"If an official who has held for at least one year an office with higher estimate of income shall later on be transferred to an office with lower estimate of income, then in case of his retirement his retirement salary shall be computed on the basis of his former higher estimate of income: *Provided, however*, That the retirement salary shall not exceed the amount of the computing estimate of income holding immediately before retirement."

There shall be no claim to the assumption of the higher estimate of income as computing basis if—

1. The office to which the official was transferred with reduction of the estimate of income does not require the full time and energy of the official, or if
2. The transfer to the office with lower estimate of income has resulted in consequence of some violation of the official duties or exclusively at the request of the official made in his own interest.

mate of income, he shall be entitled to retain his claim to widows' pension in accordance with the former higher estimate of income by obligating himself to the continued payment of the contribution to the widows' fund computed for the higher estimate of income. With reference to the term allowed for the declaration of renunciation of the increase of widows' pension effected thereby and of the cessation of the obligation to continue payment of the higher contribution to the widows' fund, the provisions of § 73, subparagraphs 2 and 3, shall respectively apply.

§ 77. *Amount of the contribution to the widows' fund of retired officials.*—The contribution to the widows' fund of a retired official—in permanent or temporary retirement (§§ 32 and 33)—shall amount to 3 per cent of the statutory retirement salary beginning with the time when his service income shall cease, with reservation of the provision of § 74.

Even if the retirement salary is wholly or partially suspended, the full amount of the widows' fund contribution shall be paid.

If the retired official is employed on pay in the service of the state under conditions which are attended with whole or partial suspension of the retirement salary, the contribution to the widows' fund shall be computed for the time on the basis of the regular estimate of the service income last drawn.

§ 78. *Maximum of the contribution to the widows' fund.*—No contribution to the widows' fund shall be paid on the estimate of income exceeding 10,000 marks.

§ 79. *Changes in the contribution and rounding (Abrundung) thereof.*—Changes in the amount of the contribution to the widows' fund to be paid by an official shall take effect regularly with the beginning of the month in which the event affecting the increase or reduction of the contribution shall have taken place. If this shall occur with the close of the month, the change in the contribution shall not begin until the beginning of the following month.

The same provision shall apply to the cessation of payment of the contribution.

The installments to be collected shall be rounded off throughout to tenths of a mark in such a way that amounts up to 5 pfennigs shall not be considered, and amounts exceeding 5 pfennigs shall be counted as 10 pfennigs.

IV. SPECIAL PROVISIONS FOR CERTAIN CLASSES OF OFFICIALS.

§ 80. *Former officers and military officials.*—The provisions of this section concerning the claim to widows' and orphans' pension and concerning the obligation to pay contributions to the widows' fund shall apply to former officers and military officials who may receive statutory appointments after this law shall go into effect, only with the proviso that the current contributions payable to the military widows' fund of Baden or under the imperial law (*Reichsgesetz*) of June 17, 1887 (*Reichsgesetzblatt*, p. 237), to the imperial fund, shall be considered in the computation of the yearly contribution to the widows' fund payable under § 70, and also the total amount of the payments due to the relicts from these funds in the computation of the widows' and orphans' pensions (§ 59 ff.).

The consideration in these computations of the contributions to the widows and orphans' fund on the basis of the said imperial law shall take place without regard to its repeal by the imperial law of March 5, 1888 (*Reichsgesetzblatt*, p. 65).

§ 81. *Former imperial officials (Reichsbeamte).*—The provisions of § 80 shall apply, respectively, to former imperial officials.

§ 82. *Roman Catholic clericals.*—The provisions of this section concerning the claims to widows' and orphans' pensions and the obligation to pay contributions to the widows' fund shall not apply to Roman Catholic clericals who may be appointed as officials.

V. THE WIDOWS' FUND OF OFFICIALS.

§ 83. *Administration of the widows' fund.*—The receipts and expenditures of the exchequer of the state made in connection with the legal provisions concerning widows' and orphans' pensions and contributions to the widows' fund (§§ 59 to 81) and with the respective transitional provisions (§§ 139 ff.) are to be kept separate from the affairs of the general administration of the state.

The business matters belonging thereto shall be administered under the supervision and direction of the ministry of finance by a "board of administration of the widows' fund of officials" to be appointed by sovereign decree.

To whom payment of the pensions (respectively of benefits, etc.) shall be legally paid, and how such payments are to be divided among several persons entitled thereto shall be determined by the administrative board with exclusion of recourse to lawsuit.

§ 84. *Payment of deficit by the state.*—If in any year the revenues from the capital, the contributions to the widows' fund, and other receipts are not sufficient to defray in addition to the administrative expenses, also benefits, state pensions, widows' and orphans' pensions, the resulting deficit shall be paid from the resources of the general state administration.

This supplementary amount (*zuschuss*) shall be fixed each time by the budget of the state, and shall contain in the first six budget periods annually at least the following amounts:

1. Twenty per cent of the estimated income of the officials acquiring for the first time statutory appointment and of the officials separated from active service, respectively, from statutory positions (by death, discharge, retirement, etc.);
2. A fixed supplementary amount of 650,000 marks.

SIXTH SECTION.—General provisions concerning the proprietary service claims of officials and of their relicts, and concerning the prosecution of legal claims against officials.

§ 85. *Allowance of a retirement salary and widows' and orphans' pensions in case of accident in the service.*—If an official employed in a trade or branch of service not subject to the imperial accident insurance has been separated from the service, retired, or has died in consequence of an accident which he has evidently undergone in the service or occasioned thereby without any fault of his, he, respectively in case of his death his widow and his children, may be granted a retirement salary, respectively widows' or orphans' pensions to the amount of the payments which the official, respectively his widow and children, could claim, if the accident had occurred in a trade subject to the imperial accident assurance, provided that a legitimate claim does not already exist under the fourth and fifth sections of this law.

§ 86. *Payment of claims.*—Payment of the statutory amounts due to officials and their relicts (salary, supplementary salary, rent money, retirement salary, benefits, widows' and orphans' pensions) shall be made regularly monthly at the end of the time due.

It is subject to decree to designate the cases in which payment shall be made annually.

§ 87. *Transfers of claims of officials and their relicts.*—The claim to the payment of the service salary, retirement salary, benefit pension, and widows' or orphans' pension, as well as other statutory claims of an official can be ceded, mortgaged, or otherwise transferred by the official or his relicts only in so far as these claims are subject to attachment (§ 749 of the regulations of civil suits).

Notice shall be given to the fund liable for the claim in a public writing to be delivered to the fund.

§ 88. *Judicial contentions concerning claims of officials and their relicts arising from conditions of service.*—Law proceedings may be instituted concerning proprietary claims of officials arising from conditions of service, as well as concerning the proprietary claims legally accorded to the relicts of officials.

However, the complaint must be preceded by a decision of the respectively authorized ministry concerning the legal claim; suit must be entered within six months after the parties concerned have been notified of the decision of the competent ministry, on penalty of loss of right of suit.

The decision of the administrative and disciplinary authorities as to whether and at what time an official shall be relieved or separated from the public service or retired by administrative or disciplinary procedure, whether and from what time an official retired under § 49 is under obligation to resume his office, and concerning the institution of compulsory measures and penalties shall be decisive for the alleged proprietary claims introduced in court.^a

^aIt remains yet to be mentioned that at the University of Freiburg there exists an institutional sick fund, established under § 60 of the law for the insurance of the sick of April 10, 1892 (R. G. Bl., p. 379), to which all persons occupied in the conduct of the university on salary or wages belong as members obligated to insurance by virtue of the law, in so far as their work by the very nature of its object or in advance by contract is limited to a period of less than one week.

Under § 14 of the statutes of this institutional sick fund, the latter makes in case of the death of a member a mortuary payment of one-twentieth of the actual pay for work.

If a person who fell ill as a member of the fund shall die after expiration of the sick

B.—PENSION CONDITIONS OF PROFESSORS AND OFFICIALS, UNIVERSITIES OF BADEN.

RETIREMENT.

REQUIREMENTS FOR RETIREMENT IN GENERAL.

§ 28. A statutory official (*etatmässig*) may be retired if he either—

1. Has completed the twenty-fifth year of life and is hindered in the performance of his duties by age; or
2. Has become incapable to perform his duties by a bodily ailment or by bodily or mental weakness; or
3. Has been kept from the performance of his duties by sickness for more than one year.

RETIREMENT ON REQUEST.

§ 29. An official may be retired on his request if it shall be established by a formal declaration of the immediately superior service authority that one of the requirements designated in § 28, Nos. 1 to 3, exists.

To what extent other additional evidence shall be required or considered sufficient in opposition to the declaration of the immediately superior authority shall depend on the judgment of the authority which has the decision concerning the retirement.

RETIREMENT WITHOUT REQUEST.

§ 30. The retirement of an official who has completed the twenty-fifth year of life may be ordered also without his request, under the provisions of § 29, after the official has been granted opportunity to make his plea.

§ 31. If the retirement of an official who has not as yet completed the twenty-fifth year of life seems indicated for one of the reasons stated under § 28, Nos. 2 and 3, the official shall be notified, if he fails to make request, by the superior service authority with statement of the reasons that his retirement is being considered.

If the official makes no objection within six weeks after such notification matters shall proceed as if he had requested retirement.

If objections are raised against retirement or if the official can not be notified the respectively competent ministry shall decide whether the proceedings shall continue, and shall eventually order an official to investigate the facts under contention as far as possible with examination under oath of witnesses and experts.

The official concerning whom the proceedings have been instituted may be present at these examinations and shall be heard after their close as to the outcome of the investigation.

The closed [final?] papers shall be submitted for decision to the competent authority which eventually may order a supplementary investigation.

CLAIM TO RETIREMENT PAY.

§ 34. A statutory official who is retired after a service period (compare § 37 ff) of at least ten years shall, in so far as this measure was not due to an affliction caused by his own gross fault, have claim to retirement pay for life under the following provisions:

Even in cases of a service period of less than ten years a claim to retirement pay shall hold if the retirement was ordered either—

1. Under §§ 32 and 33; or
2. In consequence of some sickness, wound, or other injury which the official evidently contracted in the performance of his duty or on occasion thereof without fault of his own.

benefits, the mortuary payment is still to be made if the inability to earn a living had continued until death and death had taken place in consequence of the same sickness within a year after the expiration of the sick benefits.

The portion of the mortuary payment required for defraying the expenses of burial is paid to the person in charge of the burial. An eventual excess is payable to the surviving husband or wife, in the absence of such to the nearest heirs. Should there be no such persons, the excess reverts to the fund.

AMOUNT OF RETIREMENT PAY IN GENERAL.

§ 35. The retirement pay shall carry, if the retirement takes place after the completed tenth and before the completed eleventh year of service, 30 per cent of the amount which immediately before his retirement represented the estimate of income (§ 18) of the official, and shall be increased after that with each additional year of service by $1\frac{1}{2}$ per cent of that sum.

In the case designated in § 34, subparagraph 2, No. 2, the retirement pay shall carry 30 per cent of the determining estimate of income.

The retirement pay shall not exceed 75 per cent of the estimate of income and 7,500 marks.

If the retired official has claim to retirement pay (*Wartegeld*), and the like against the Empire, some other State, some commune or church, due to some previous condition of service, the amount of this latter retirement pay (*Wartegeld*), and the like, shall be subtracted from the retirement pay determined under the above provisions, [and] the official shall have claim only to the remaining amount.

CREDIT FOR A PREVIOUSLY DRAWN HIGHER SERVICE INCOME.

§ 42. If an official who held for at least one year an office with higher estimate of income has been transferred later on to another office with a smaller estimate of income, his retirement pay in case of retirement shall be determined on the basis of that higher estimate of income, with the restriction, however, that the retirement pay shall not exceed the amount of the determining estimate of income of the official immediately before his retirement.

The claim to the use of the higher estimate of income as basis does not exist if—

1. The office to which the official was appointed with reduction of the estimate of income does not require his entire time and energy; or if
2. The appointment to the office connected with a smaller estimate of income was made in consequence of a violation of the duties incumbent on the official or wholly at the request of the official made in his own interest.

CONSIDERATION OF THE FORMER OCCUPANCY OF A STATUTORY OFFICE.

§ 43. If an official who has earned in a statutory position a legal claim to retirement pay in the event of retirement is transferred to a nonstatutory position and later on is separated from the service for one of the reasons given in § 28, Nos. 1 to 3, he shall have claim to retirement pay computed on the basis of the last estimate of income of the statutory position and the time of service elapsed up to his transfer.

In the presence of weighty reasons the later time of service may, however, also be credited to him wholly or in part.

No claim exists if the transfer to the nonstatutory position has been made under one of the provisions indicated in § 42, subparagraph 2.

EXCEPTIONAL INCREASE OF THE RETIREMENT PAY.

§ 44. By sovereign decree an exceptional increase of the statutory retirement pay may be granted up to the amount of the last determining estimate of income, if the official has deserved exceptionally well of the sovereign of the Fatherland by prominent services.

OPTIONAL ALLOWANCE OF RETIREMENT PAY.

§ 45. If a statutory official who has no claim to retirement pay is retired under § 28, he may be granted revocable retirement pay to the amount of 30 per cent of the last determining estimate of income, in accordance with existing necessities in his personal circumstances.

ALLOWANCE OF BENEFIT PAY (UNTERSTUETZUNGSGEHALT).

§ 46. If a nonstatutory official, whose office has claimed his whole time and energy, is separated from the service of the state because of incapacitation for service for no fault of his, he may be granted, in the measure of existing neces-

sities in his personal circumstances, revocable benefit payments up to the amount determined through appropriate application of the statutory provisions concerning the amount of retirement pay.

Benefit payments shall not exceed, however, 40 per cent of the amount which results from appropriate application of the respective provisions as the last determining estimate of income.

BEGINNING OF THE PAYMENTS OF RETIREMENT PAY.

§ 47. Payments of retirement pay shall be made to the official beginning with the time when his previous service income shall cease. Even if the retired official is relieved of his official duties at an earlier time, he shall continue to draw his service income for an additional month after the lapse of the month in which he has been notified of the decision as to his retirement. Variable payments and payments in kind are excepted from this in so far as their receipt is conditional on actual service.

An earlier time for the cessation of the payment of the previous service income can be established only with the consent of the official; a later time, however, in the order concerning the retirement.

ROUNDING OFF (ABRUNDUNG).

§ 48. If in the computation of the retirement or benefit pay there result fractional parts of a mark, these are to be counted as a full mark.

REAPPOINTMENT OF RETIRED OFFICIALS.

§ 49. An official in temporary retirement under § 32 or § 33 is under obligation again to accept office on request of the competent authority, in so far as there exist the conditions under which the official in accordance with § 5 can be transferred without his consent from the office held immediately before his retirement to the office offered him.

This applies also to the officials retired under § 28, Nos. 2 and 3, in so far as they may again have become fit for service.

The official is under obligation to enter upon the appointment offered to him within three months from the day on which he was notified of his reappointment.

EXTINCTION OF THE RETIREMENT PAY.

§ 50. The claim to retirement pay ceases when the claimant—

1. Is separated from the service of the state in consequence of a criminal or disciplinary judgment; or
2. Enters again upon a statutory appointment in the home service; or
3. Declines acceptance of an appointment offered him under § 49.

SUSPENSION OF RETIREMENT PAY.

§ 51. The claim to retirement pay shall be suspended:

1. If the claimant takes up his residence without the approval of the government beyond the limits of the imperial realm until his return, respectively, until subsequent approval; or
2. If he loses imperial citizenship, until its eventual recovery; or
3. As long as he—except in the case under § 50, No. 2—draws a salary or retirement pay (*Wartegeld*) from employment in the home state service or in other public service (viz, in the service of another state, of the empire, of a church, a commune, or other communal organization), or in the service of the court or court administration, in so far as the amount of such income added to the formerly earned retirement pay shall exceed by more than 10 per cent the amount of the estimate of income used as a basis in computing the amount of this retirement pay; or
4. If he exercises the functions of an attorneyship, and this, after the expiration of two years from his registration as attorney, to the extinction of this registration.

The effect designated in No. 3 applies only to the employment in such activity as is usually assigned to other officials.

TIME FOR THE BEGINNING OF THE EXTINCTION OF THE SUSPENSION AND OF THE RESTORATION OF RETIREMENT PAY.

§ 52. The extinction, the suspension, and the restoration of the retirement pay in the cases under §§ 50 and 51 shall begin with the month which succeeds the event that brought up such change.

In the case of § 50, No. 1, the claim to retirement pay is extinguished as soon as the criminal or disciplinary judgment shall have taken effect.

The suspension shall not take place in the cases of § 51, No. 3, if this measure is not to be ordered in accordance with the first subparagraph for a period of at least three successive months.

AUTHORITY FOR TRANSFER TO RETIREMENT.

§ 53. The transfer to retirement with reference to officials appointed by order of the sovereign shall be made by the sovereign; in other cases by the respective ministry.

AUTHORITY FOR GRANTING RETIREMENT AND BENEFIT PAY.

§ 54. In so far as the respective order is not by law or decree reserved for the sovereign, the order as to whether and in what amount retirement or benefit pay shall be granted to an official, and whether the conditions for their extinction, suspension, or restoration exist, shall issue from the respective ministry in connection with the ministry of finance.

VII. THE GRAND DUCAL HESSIAN LUDEWIG UNIVERSITY OF GIESSEN.

A.—PROVISIONS FOR THE WIDOWS AND ORPHANS OF TEACHERS AND OFFICIALS.

The widows and orphans of the teachers and officials employed at the Grand Ducal Ludewig University of Giessen take part in the first place in the General Widows Institute for Civil Officials of the Grand Duchy of Hesse. Under the law of June 30, 1886, applying thereto (Government Annual (*Regierungsblatt*) of 1886, No. 15, pp. 95 ff.), all teachers and officials employed at the university are obligatory members of said institute. The annual contributions amount to 3 per cent of the service income entitling to pension or of the service pension; the amount exceeding the annual sum of 5,400 marks of a service pension pays no contribution.

For widows the yearly pension amounts to 30 per cent of the service pension earned at his death by her husband—at least, however, 160 marks, and at most 1,600 marks. With salaries of more than 2,500 marks, the widow's pension is fixed at a minimum of 500 marks.

Half-orphans receive one-fifth of the widow's pension each. A full orphan receives two-thirds, two full orphans one-half each, three or more one-third each, of the widow's pension. Widows' and orphans' pensions in the aggregate may not, however, ever exceed 2,400 marks. After the completed eighteenth year the claim to orphans' pension is extinguished.

Law of June 30, 1886, concerning the Widows' Institute for Civil Officials.

Article 1.—Entitled and obligated to membership in the Widows' Institute for Civil Officials, under the provisions of this law, are all irrevocably and all revocably appointed state officials, respectively employees; the officials of the state forestry, however, only if their accession to the Widows' Institute for State Officials shall have been made by declaration of the Widows' Institute of Forestry Officials representing them, on or before August 1, 1886. This declaration may be delivered by each of the two divisions of Widows' Institute for Forestry Officials separately, and shall entail the accession of all the members of the respective divisions, as well as the transfer of the entire properties belonging to the division to the Widows' Institute for Civil Officials.

In so far as the present law contains provisions that refer to the previous mem-

bership and to the previous relation of the civil officials, respectively, employees to the widows' fund for civil officials, these shall apply equally to the previous membership and the previous relations of the officials of the state forestry to the Widows' Institute of the Officials of the State Forestry of the first and second divisions, in case of the accession of the state forestry officials to said institute, in so far as different relations have not been expressly stipulated.

Article 2.—The members of the Widows' Institute of Civil State Officials are under obligation to pay widows' and orphans' contributions into the fund of the institute.

Article 3.—Widows' and orphans' contributions shall also be paid for the mortuary quarter payment due to the relics of a member of the Widows' Institute for Civil Officials, under the law of November 27, 1874, concerning the mortuary quarter payments of civil officials, the law of November 27, 1874, concerning the revision of the provisions relating to the retirement of civil officials, and the law of May 10, 1875, concerning the pensioning of officials appointed on revocation.

Article 4.—The widows' and orphans' contributions shall amount annually to 3 per cent of the service income subject to pension or of the service pension, provided that the amount of this pension in excess of the yearly sum of 5,400 marks shall not pay contribution.

Similarly the pension increments allowed in special cases, under article 21 of the law of April 12, 1820, concerning the official service relations of civil state officials, and article 3 of the law of May 10, 1875, concerning the pensioning of officials appointed on revocation, shall not be considered in the computation of widows' and orphans' contributions.

For officials whose income consists of fees, the income fixed as basis in the computation of their service pensions shall serve as basis in computing their widows' and orphans' contributions. With notaries this basis shall be an income corresponding with the average salary of the judges of districts and provinces (*Amts- u. Landrichter*).

The annual contributions thus computed shall be rounded off, so that they may be divisible by 12 without a remainder in pfennigs.

Article 5.—The previous (*seitherigen*) members of the Widows' Institute for Civil State Officials, who, under the provisions of this law, shall enter into the new relation, shall be credited with the paid entrance fee in such a way that with members—

- (1) Of the first class drawing up to 8,500 marks of pensionable salary,
- (2) Of the second class drawing up to 6,400 marks of pensionable salary,
- (3) Of the third class drawing up to 4,200 marks of pensionable salary,
- (4) Of the fourth class drawing up to 3,400 marks of pensionable salary,
- (5) Of the fifth class drawing up to 2,500 marks of pensionable salary,
- (6) Of the sixth class drawing up to 2,100 marks of pensionable salary,
- (7) Of the seventh class drawing up to 1,700 marks of pensionable salary,
- (8) Of the eighth class drawing up to 1,200 marks of pensionable salary,
- (9) Of the ninth class drawing up to 800 marks of pensionable salary,

the widows' and orphans' contributions shall be computed at 2 per cent, and only the portion of pensionable salary in excess of these amounts at 3 per cent.

The provisions of this article shall apply to the state forestry officials in case of their accession to the Widows' Institute of Civil State Officials, with the proviso that for the previous members of the first class of the first division of the Widows' Institute of Forestry Officials drawing up to 4,600 marks of pensionable salary, for the previous members of the second class of the first division drawing up to 3,400 marks of pensionable salary, and for the previous members of the second division of the Widows' Institute for Forestry Officials drawing up to 800 marks of pensionable salary, the widows' and orphans' contributions shall be computed at 2 per cent, and only for the portion of pensionable salary exceeding these amounts at 3 per cent.

Paid entrance fees shall not be returned on separation from the Widows and Orphans' Institute for Civil State Officials of members that have passed into the new relation.

Article 6.—The widows' and orphans' contributions shall be collected in advance in those installments in which service income or pensions are payable, by retention of the corresponding installments of these amounts and their payment into the fund of the institute; from notaries and officials appointed on fees, however, in quarterly payments.

Article 7.—The obligation to pay widows' and orphans' contributions shall cease:

1. With the death of the official or pensioner, with reservation of the provision of article 3;
2. If the official is relieved of service or is separated from the service with retention of a part of his pension.

Article 8.—The widow and the surviving legitimate children or children legitimized by subsequent marriage of an official obligated at the time of his death to the payment of widows' and orphans' contributions shall receive from the fund of the institute widows' and orphans' pensions under the following provisions:

Article 9.—The widow's pension shall carry 30 per cent of the pension to which the deceased was entitled, or would have been entitled, if he had been retired on the day of his death.

With notaries the widow's pension shall consist of 30 per cent of the amount which would have resulted as pension of the notary on the basis of the average salary of judges of districts and provinces under the provisions of the law of November 27, 1874, concerning the revision of the provisions for the retirement of civil officials if he could have been retired on the day of his death.

With irrevocably appointed officials during the first five years of their appointment, and with officials appointed on revocation, the widow's pension shall carry 30 per cent of the pension which may have been allowed or could have been allowed the deceased if he had been retired on the day of his death under the provisions of the law of November 27, 1874, concerning the revision of the provisions for the retirement of civil officials, respectively of the law of May 10, 1875, concerning the pensioning of officials appointed on revocation.

The widow's pension shall, however, with reservation of the restrictions provided in articles 11 and 13, not carry less than 160 marks nor more than 1,600 marks, and shall with salaries up to 2,500 marks, inclusive, amount to at least one-fifth of the salary, and with higher salaries at least 500 marks.

The pension increments allowed in special cases, under article 21 of the law of April 12, 1820, concerning the public service relations of civil state officials, and under article 3 of the law of May 10, 1875, concerning the pensioning of officials appointed on revocation, shall not be considered in the computation of widows' pensions.

Article 10.—The orphans' pensions shall carry:

1. For children whose mother is living and entitled to pension at the time of the death of the official, one-fifth of the widow's pension for each child;

2. For children whose mother is no longer living or at the time of the death of the official not entitled to a widow's pension:

- (a) In the presence of one child entitled to payment, two-thirds of the widow's pension;
- (b) In the presence of two children entitled to payment, one-half of the same;
- (c) In the presence of three or more such children, one-third of the same for each child.

The amount of the annual widows' and orphans' pension shall be rounded off for each claimant as above, so that each amount may be divisible by 12 without remainder of pfennigs.

Article 11.—Widows' and orphans' pensions shall, neither singly nor in the aggregate, exceed the amount of the service pension to which the deceased was entitled or would have been entitled had he been retired on the day of his death.

In applying this limitation the widows' and orphans' pensions shall be reduced proportionately.

The aggregate of widows' and orphans' pensions shall never exceed 2,000 marks.

Article 12.—On the elimination of a claimant of widows' or orphans' pension, the pensions of the remaining claimants shall be increased beginning with the month next following, in so far as they are not as yet in full enjoyment of amounts due them under articles 9 and 10.

Article 13.—If the widow was more than twenty years younger than the deceased, and if the latter at the time of his marriage had already passed the fiftieth year of life, the widow's pension computed under article 9 shall be reduced by one-twentieth for each beginning year of the difference of age over twenty and up to thirty, inclusive.

The reductions shall have no influence upon the amounts of orphans' pensions computed under article 9.

Article 14.—The widow shall have no claim if her marriage with the deceased was concluded within three months of his death and was concluded for the purpose of securing for the widow the payment of a widow's pension.

Article 15.—The payment of widows' and orphans' pensions shall begin with the end of the mortuary quarter (*Sterbe quartal*), and for children born after this time with the day of their birth.

Article 16.—The widows' and orphans' pensions shall be paid monthly in advance. To whom legal payment shall be made shall be determined by our ministry of the interior and of justice, which may transfer the authority for such determination to the commission established for the administration of the Widows' Institute for Civil State Officials, respectively, to the authority (*Behörde*) to which this was intrusted (article 30).

If several persons alleging title raise contradictory claims to the widows' and orphans' pensions, our ministry of the interior and of justice, or upon its request the established commission, or, respectively, the authority intrusted with the administration of Widows' Institute for Civil State Officials, shall be authorized to refer the contestants to judicial process; but shall be empowered, until the case shall be legally decided, to decide temporarily as to the payment of the widows' and orphans' pensions to one or several of the contestants with the legal effect that by the payments made in accordance therewith the fund shall be relieved of all further responsibility. To the victorious parties there remains therefore, in contingent cases only, reclamation from those who, under the judgment of the court, may have received too much from the fund.

Uncollected installments of the widows' and orphans' pensions shall become superannuated after four years from the day they were due for the benefit of the chief exchequer of state.

Article 17.—Widows' and orphans' pensions can not be legally ceded, mortgaged, or otherwise transferred.

Article 18.—The claim to the payment of widows' and orphans' pensions shall become extinct:

1. For each claimant with the end of the month in which he or she dies or is married;
2. For each orphan, moreover, with the end of the month in which he or she shall complete the eighteenth year of her life.

Article 19.—The title to the payment of widows' and orphans' pensions shall be suspended if the claimant shall lose German citizenship, until its eventual restoration.

Article 20.—The mortuary quarter payments (*Sterbe quartal*) assigned to the Widows' Institute for Civil Officials under the decree of June 25, 1812, shall continue to be paid to this institute at 25 per cent of the pensionable yearly income or the yearly service pension and from the fund from which the deceased official had to draw his salary or pension.

If the official drew his pensionable salary or pension from different funds, each of these shall pay a proportionate amount.

With notaries the mortuary quarter payment shall be paid from the state fund (*Staats Kasse*); also with officials whose pensionable income consists wholly or in part of fees, unless under subarticle 2 another fund shall be obligated to such payment wholly or in part.

Article 21.—The provisions of this law shall take effect on October 1, 1886.

Article 22.—The present law shall not apply to the widows and orphans of state officials who may have died before October 1, 1886.

However, the widows and orphans of such state officials who were members of the Widows' Institute for Civil State Officials, and who died in the period from April 1 to September 30, 1886, either in active service or after retirement within this period, shall be entitled to demand that their widows' and orphans' pensions be computed under the provisions of the present law, provided that they shall present such claim to the commission of the Widows' Institute for Civil State Officials before October 15, 1886.

Article 23.—Those active state officials, as well as those state officials retired in the period from April 1 to September 30, 1886, who became members of the Widows' Institute for Civil Officials before October 1, 1886, either by virtue of the law or by provisional admission, shall be at liberty to continue in their former relation to the institute with retention of their respective pension claims of their widows and orphans and the corresponding yearly contributions and entrance fees. They shall, however, be held to notify the commission of the widows' fund for civil officials of their decision before October

1, 1886, else it shall be assumed that they submit to the provisions of the present law.

Article 24.—All those active state officials, as well as those state officials retired in the period from April 1 to September 30, 1886, who became members of the Widows' Institute for Civil Officials either by virtue of the law or by provisional admission, and who have not availed themselves of the right granted them under article 23, shall suffer deduction of the widows' and orphans' contributions established under articles 4 and 5 beginning with October 1. Subsequent reclamations thereon shall not be considered.

However, the relicts of such officials shall be entitled to draw as much combined widows' and orphans' pension as they would have drawn if the official had remained in his former relation to the institute, if said officials in a declaration to be delivered to the commission of the Widows' Institute for Civil State Officials before October 1, 1886, obligate themselves to continue payment of the higher contributions due under the former relation to the Widows' Institute of Civil Officials until the widows' and orphans' contributions, under articles 4 and 5 of the present law, shall be computed at the same or higher amounts.

Article 25.—Those state officials who became members of the Widows' Institute for Civil Officials before April 1, 1886, and who were retired before this time, shall continue in their former relation to the institute, with retention of the pension claims of the widows and orphans and the corresponding contributions connected therewith.

The same shall apply to such members of the Widows' Institute of Civil Officials, respectively, to their relicts, to whom there was granted before October 1, 1886—although they may be separated from the state service—continuance in said institute exceptionally or under article 2 of the law of May 27, 1870, concerning the Widows' Institute of Civil Officials.

Article 26.—Those court officials who became members of the Widows' Institute for Civil Officials before October 1, 1886, whether still in active service or already retired, shall continue in their former relation to the institute with retention of the pension claims of widows and orphans and the corresponding yearly contributions and entrance fees connected therewith.

The court officials obtaining their first appointment on or after October 1, 1886, shall be excluded from admission to the institute.

On the death of a court official remaining in the Widows' Institute for Civil Officials our cabinet fund shall pay the mortuary quarter payment into the fund of the Widows' Institute for Civil Officials in accordance with the provisions heretofore in force.

The pensions of widows and orphans of court officials deceased before October 1, 1886, shall continue to be paid also hereafter by the fund of the Widows' Institute for Civil Officials.

Article 27.—As contribution to the expenses of pensioning the widows and orphans of court officials receiving their first appointment on or after October 1, 1886, the fund of the Widows' Institute for Civil Officials shall pay a fixed, irrecoverable, annual revenue of 8,000 marks in quarterly installments to the bureau or fund to be designated by us.

Article 28.—To the property of the Widows' Institute for Civil Officials shall be assigned that of the sustentation fund of the customs department. The liabilities resting upon this fund shall pass to the Widows' Institute for Civil Officials with its transfer.

Article 29.—The existence of the institute shall be guaranteed by the state under article 49 of the constitutional charter in such a way that the exchequer of the state shall contribute whatsoever the institute can not defray in the fulfillment of its liabilities without trespassing upon its capital, without regard to the gradual use of the entrance fees of the former members of the Widows' Institute for Civil Officials who passed into the new relation under the provisions of this law.

Article 30.—Concerning the administration of the institute the necessary provisions shall be made under decree.

Article 31.—All still existing laws, decrees, and orders concerning the Widows' Institute for Civil Officials which are not modified by the present law shall continue in force.

The provisions of § 30 of the decree of October 2, 1808, concerning the establishment, endowment, and administration of a general civil widows' pensioning institute, shall apply also to the institute to be established for the pensioning of the widows and orphans of future court officials in the form of article 17 of the present law.

Article 32.—The execution of this law is committed to our ministry of the interior and of justice.

In addition to this general care on the part of the State, there exists for the widows of members of the university the following provident establishments:

(a) *The institute Neubauer.*

This was founded by the testament of the government advocate Neubauer of February 6, 1797. The respective passages of this testament are as follows:

"My house and adjoining house with the two gardens and also the garden on the Rigel path, I hereby dedicate and will for an endowment and residence for two widows of professors and two widows of advocates.

"Only such widow of a professor (ordinary or extraordinary professor) or such widow of an advocate shall be competent to enjoy this endowment, as shall not possess sufficient property of her own for support conformable to her position, but shall not have lost it by her own loose management, and as shall lead a virtuous and unblemished life; for if subsequently she should be guilty of bad and low conduct she would lose her free residence and the enjoyment of this endowment.

"Whether a professor's widow be qualified for this endowment, or also eventually should again lose it, that shall be decided by the grand ducal (*fuertlich*) university, as well as with advocates' widows the grand ducal government."

The said buildings were sold in the year 1860 in order to avoid necessary expenses for repairs, and with the proceeds, by order of the grand ducal ministry, two independent institutes were created, one of which is administered by the university, the other by the then superior court (now provincial court) at Giessen.

The capital thus fallen to the university amounts to 7,417.14 marks; the proceeds derived therefrom, amounting to 297.06 marks, are distributed to two professors' widows in accordance with the provisions of the Neubauer testament.

(b) *The university widows' fund.*

Until the year 1818 the university had its own widows' fund. Not until this year was it united with the general widows' fund for civil officials. The former widows' fund of the university was transferred to the state fund. Only the so-called Holzheim estate was retained by the university, and its revenues continued to be applied to the exclusive benefit of the widows of university officials. The respective passages of the decree of the grand ducal ministry of the 16th of December, 1818, are as follows:

"The income from the estate Holzheim, however, shall be retained by the university and shall be divided as heretofore, after deduction of the taxes thereon and other duties, among the widows, etc.

"Finally, it is approved that, after the decease of the present participants in the university widows' fund, in future only the widows and orphans of the actual professors deceased during their appointment at the university shall be admitted to the enjoyment of the pensions in kind to be derived from the Holzheim estate, and that if the number of such widows shall be fewer than five one-fifth of the total income in rent shall remain and the rest shall be applied to a capital which in the future might be used for the support of especially needy widows and orphans of professors and other university officials."

In the thirties the Holzheim estate was sold. The proceeds since that time constitute the university widows' fund.

The provisions thereof of the ministerial decree of August 10, 1840, are as follows:

"1. From the proceeds of the sale of the widows' fund estate Holzheim and from the eventual arrearages of the rent of this estate up to its sale, a special fund for the support of widows of professors and other university officials shall be established beginning with the year 1838, inclusive, which fund shall be accounted for separately and administered without compensation by the university accountant under the supervision of the grand ducal academic commission of administration.

"2. Beginning with the year 1838, inclusive, a separate account shall be drawn up of receipts and expenditures for each year, and at its close, and submitted, with the original papers on or before July 1 of the following year, to the grand ducal chamber of accounts for revision.

"3. As to the use of the fund for pensions and benefits, our decree of June 7, 1839, No. D. 20258 and No. A. C. 946, shall remain in force for the year 1838, according to which each of the present twelve professors' widows shall receive for this year a pension of 30 florins (gulden).

"4. We approve that for the year 1839 and thereafter the annual widows' pension shall be fixed provisionally at 40 florins; however, with the express proviso that the interest of the capital and proceeds of sale, as well as the general condition of the fund, shall be sufficient to pay this sum to each of the widows present without drawing on the substance of the fund, which must be preserved at all times, and on its property.

"5. Should the proviso just named under 4 not prevail, then the widows' pension provisionally fixed at 40 florins shall suffer a reduction, and only that amount shall be distributed in equal shares for the respective year among the widows present which is available for that year as net surplus and income of the fund.

"6. The widows' pension fixed under No. 4 at 40 florins annually shall hold for the present; also in the event that a reduction in the number of widows or some other increase of the income of the fund should render possible the payment of a higher pension, and in such event the resulting surplus shall either be added to the substance of the property of the fund or applied to the extraordinary support of widows and orphans of university officials, in accordance with our decision thereon to be made on your report to be submitted to us concerning this.

"7. Since it is a matter of interest to us to remain constantly informed concerning the condition of the fund, and the pensions and benefits paid therefrom, and to determine the amount of the latter, you will submit to us after each year and before drafting and closing the account an abstract concerning the condition of the fund for the respective year, together with a report of your propositions based thereon concerning the determination of the amount of the pensions and the use of the surplus generally, and to await our decisions thereon, after the receipt of which, and not sooner, the actual assignment and payment of the pensions and benefits for the respective year can be made."

At present this university widows' fund amounts to 28,099.99 marks; the interest income is 1,195.58 marks. From this the professors' widows entitled to payments receive at present 100 marks; besides, three widows of university officials receive together 160 marks. The rest is added to the capital.

B.—PENSION CONDITIONS OF THE PROFESSORS AND OFFICIALS OF THE UNIVERSITY OF GIESSEN.

[From the grand ducal Hessian *Regierungsblatt*, Darmstadt, 1874, pp. 672 ff.]

Law concerning the revision of the provisions on the retirement of civil officials.

Article 2. If an official shall be retired after completing the fifth year of service, he shall receive as retirement salary (pension) 40 per cent of his salary. For each additional completed year of service from the sixth to the tenth year of service there shall be added 2 per cent; from the eleventh to the thirtieth, $1\frac{1}{2}$ per cent, and from the thirty-first to the fortieth year of service 1 per cent.

Whoever shall be retired after completing the fiftieth year of service shall receive the full amount of his salary as pension, without prejudice to the provisions contained in article 9.

Article 3. The time of service shall be computed in determining the pension from the day of the decree of first appointment.

Besides, in computing the time of service the time shall also be counted during which an official—

1. After fully passing the state examination shall have been employed with some office on remuneration or per diem pay, in so far as such employment had been ordered or approved by one of our ministries or other competent authority.
2. Was previously appointed in the service of the Empire or of some other state.

With reappointed officials the time of their previous pensioning shall be counted.

The finally valid computation of the time of service in the case of sub-article 2, No. 1, shall be ordered in a decision of the respective ministry handed to the official with the decree of appointment.

Article 7.—An official may, after a time of service of forty years, or after completing the seventieth year of life, resign his position, and shall then receive the retirement salary due him in the proportion of his time of service.

Article 8.—If in the decree granting the salary or increment of salary the salary and representation salary are not expressly separated, it shall be assumed in all increments of salary that the part of the salary which is in excess of 6,800 marks is granted as representation salary, and shall, therefore, not be considered with reference to pension claim. The pensionable salary can never exceed 10,000 marks.

Article 9.—If a pensioner leaves a widow or legitimate children who lived with him in domestic community, they shall be paid the retirement salary for three months after the day of death. However, the relicts shall have no claim to widows and orphans' pensions for the time they continue to draw the retirement salary.

If the deceased left in destitution parents, brothers or sisters, or nephews or nieces whose provider he was, or legitimate progeny that did not live in domestic community with him, or if his estate is not sufficient to defray the expenses of the last sickness and burial, the respective ministry may grant the retirement salary for three months longer after the day of death.

To whom the retirement salary shall be paid in either event shall be determined by the ministry.

The retirement salary granted beyond the month of death can not become subject to attachment.

Article 10.—Members of a college of justice can be retired against their will only on account of eventual permanent incapacitation in consequence of bodily or mental weakness, and even then only on the basis of a plenary resolution of the highest court of the Grand Duchy confirming such incapacitation with a majority of at least two-thirds. This provision shall take effect only with the regulation of the process by a law.

With reference to the directors of a college of justice, existing provisions shall continue in force.

Article 11.—The officials entitled to pension on the day of promulgation of this law are guaranteed their claims as to amount of pension in accordance with the legal provisions prevailing heretofore, so that the pension to be allowed them shall not fall below the amount which would have been due them, taking into account statutory compensation in kind, if they had been pensioned on the day of the promulgation of this law. If on the day of their actual retirement the present law grants a pension higher than the pension guaranteed to them above, this more favorable provision shall apply to them.

Article 12.—Already appointed officials to whom article 3, subparagraph 2, No. 1, applies shall present to the respective ministry and establish their eventual claims within an exclusive term of six months after this law shall have taken effect.

After the close of this term the finally valid computation of the time of service shall be announced in a decree of the respective ministry to be transmitted to the official.

With our approval the finally valid computation of the time of service may be made within three months after this law shall take effect, in the event of article 6, with officials who already before the promulgation of this law shall have been transferred to the state service.

The process is duty free.

[From the Grandducal Hessian Regierungsblatt, Darmstadt, 1875, pp. 2 and 3.]

Law concerning the completion of the provisions of articles 7 and 15 of the edict of April 12, 1820, with regard to the public-service relations of the civil state officials.

Article 1.—No actual state official shall hereafter accept an additional office or employment with which a continuous remuneration is connected without first having received the approval thereto from the respective superior ministry.

The same approval is required for entrance on the part of an actual state

official into the directory, administrative board, or supervisory board of an association seeking profit or into a committee for the establishment of such an association. The approval shall not be granted if the participation of the respective official is directly or indirectly connected with the regular or irregular receipt of money or money's worth.

Article 2.—Officials who have been retired shall hereafter, on penalty of loss of their retirement salary, enter only with the approval of their superior ministry into the directory, administrative board, or supervisory board of an association established for profit if their participation is directly or indirectly connected with the regular or irregular receipt of money or money's worth.

Article 3.—An approval in the case of article 1 may be revoked at any time, as long as the official is engaged in the active state service, but in the case of article 2 it can not be revoked as long as the official remains in retirement. It can, however, be recalled also in the latter case, if the pensioner under article 15 of the edict of April 12, 1820, enters again upon active service.

Article 4.—If an actual state official had entered already before promulgation of this law into the directory, administrative board, or supervisory board of an association for profit or into a committee formed for the establishment of such an association, the continuance of such relationship may be prohibited if the further participation of the official is contrary to the interests of the service in the judgment of the superior ministry.

VIII. THE GRAND DUCAL UNIVERSITY OF SAXONY, AT JENA.

WIDOWS AND ORPHANS' PENSION INSTITUTE.

For the University of Jena there exists since July 1, 1863, a new Widows and Orphans' Pension Institute, in which is incorporated the Widows' Institute—existing since the year 1817—for the actual faculty members of the Academy of Jena, with all its funds, including the capital of the mutual sheriff's court (*Schöppentuhl*).

Membership in this Widows and Orphans' Pension Institute is obligatory for the employees appointed with a salary derived from academic funds, as well as for all married employees, from the date of the appointment decree, respectively, from the day of marriage. The annual contribution to be paid by the members depends on the amount of assured pension and carries, respectively, 90 marks, 67.50 marks, and 45 marks. The yearly pension carries, according to the wish of the assured, respectively, 600 marks, 450 marks, and 300 marks.

If a member dies—

- (a) Leaving a widow without children, the widow receives the full pension as long as she remains in a state of widowhood;
- (b) If he leaves children without a widow, the children receive together the full pension as long as a child entitled to pension remains; and
- (c) If he leaves a widow and children the widow receives one-half of the pension as long as she remains in the state of widowhood and the children the other half as long as a child entitled to pension remains. If no such child remains or if the widow dies or marries again the remaining party receives the entire pension and the provisions under *a* and *b* apply.

The pension claim of the children holds as long as they have not completed the twenty-first year of life.

Statutes of the new Widows and Orphans' Pension Institute of the University of Jena.

§ 1. Beginning with July 1, 1863, there shall exist for the University of Jena a new Widows and Orphans' Pension Institute with which the Widows' Institute existing since the year 1817 for the actual faculty members of the Academy of Jena, with all its funds, shall be incorporated in such a way that especially also the capital property of the mutual sheriff's court, joined therewith under § 27 of the statutes of 1817, shall pass into the aggregate fund of the new institute.

§ 2. The new Widows and Orphans' Pension Institute exists under the provisions made therefor in the following paragraphs:

- (a) For the ordinary and extraordinary professors;
- (b) Under the assumption that they are definitively appointed with a salary derived from academic funds, for the academic teachers, officers, and servants named below—
 1. The university equerry.
 2. The lector of modern languages.
 3. The university music director and concert master.
 4. The university fencing master.
 5. The assistants of the librarian.
 6. The custodian of the library.
 7. The university bailiff.
 8. The secretary of the university.
 9. The keeper of the archives of the university.
 10. The actuary of the university.
 11. The warden of revenues of the university.
 12. The questor of the university.
 13. The cashier of the refectory.
 14. The forester of Remda.
 15. The depositor and chief bedel.
 16. The assistant bedels.
 17. The keeper of the career and college doorkeeper.
 18. The steward of the new college house.

§ 3. By the incorporation of the older Widows' Institute into the new institution nothing is changed in the pension rights already established under the statutes of 1817, which rights are hereby expressly reserved. For the former members of the older Widows' Institute and their heirs entitled to pension this institute shall continue to exist unchanged, with all the rights and duties prescribed in the statutes of 1817, until with the successive death or withdrawal, respectively, of these members it shall become wholly extinct.

§ 4. All those who at the establishment of the new institute are already appointed in one of the positions named under § 2, and who are not already members of the former institute, are entitled to admission into the former, in so far as they are not obligated thereto under the provision made under § 5, letter *b*.

Of course, a person not obligated, but merely entitled to membership of the new institute, shall lose this claim, without prejudice to the obligation eventually arising under § 5, *b*, if he does not declare his entrance on or before January 1, 1864, and consequently his relic cannot expect support even as a gratuity.

§ 5. The following shall be members of the new institute without further steps:

- (a) Those who after its establishment shall be definitively appointed, with a salary derived from an academic fund, in one of the positions named under § 2, *a* and *b*, whether they are married or not, and also those who shall be newly appointed without salary in such a position, if they are married or as soon as they shall be married.
- (b) Those who, already before establishment of the new institute, were appointed in one of the positions under § 2, *a* and *b*, as soon as they shall receive from academic funds a new salary or an increase of salary, whether they are married or not, and also of those already appointed who are unmarried as soon as they shall be married, whether they are salaried or not.

Obligatory membership shall begin with those named above, under *a*, with the date of the first respective appointment decree, respectively with the day of marriage, and with those named under *b* with the date of the order issued on account of the salary, respectively, of the day of marriage.

§ 6. Should later on a new office be established at the university and endowed with a fixed salary from academic funds, special provision concerning the reception of its incumbent into the Widows and Orphans' Pension Institute is hereby reserved.

§ 7. Each member newly entered into the institute shall immediately on his admission pay as entrance fee a sum equal to his annual contribution in addition to his contribution itself into the reserve fund to be formed under § 10.

§ 8. In so far as other provisions are not made under § 9 each member of the new institute is at liberty to insure for his relicts a yearly pension of either 200

thalers, 150 thalers, or 100 thalers. Accordingly, he shall pay a yearly contribution of either 30 thalers, 22½ thalers, or 15 thalers.

No claim can be acquired to a yearly pension higher than 200 thalers in any case, not even by combining several positions in one pension.

If, however, a member has insured in the beginning a smaller pension, he shall be permitted to increase it later on, if he pays for the period from his first entrance the corresponding arrearage both of entrance fees and annual contributions, both with interest of 5 per cent annually from the times they were respectively due.

A reduction of the once-fixed contribution shall not be admissible in any case. The contributions, even if the member from whom they are due has become a widower, shall continue to be paid in the amount hitherto paid.

§ 9. For the relicts of the university depositor the annual pension shall amount to 70 thalers; for the university employees named in § 2, under 16, 17, and 18, 50 thalers. In return the former shall pay an annual contribution of 10½ thalers and the latter such contribution of 7½ thalers.

§ 10. The payments of the annual contributions into the fund of the institute shall be made in quarterly installments. With salaried members these contributions and the entrance fees shall be deducted by the revenue office (*Rentamt*) from the salary payments for the respective quarters; with nonsalaried members they shall be collected by a beadle in the last week of each quarter.

§ 11. Whoever, except in the case of retirement, shall resign his position at the university or lose it by legal judgment, shall at the same time cease to be a member of the Widows and Orphans' Pension Institute, but shall have no claim to the already-paid entrance fees and contributions.

§ 12. If a member of the Widows and Orphans' Pension Institute dies his widow and children shall receive, in so far as they shall be entitled to pension under §§ 14 and 15, the yearly pension secured to them for such event in quarterly installments in advance, beginning with the quarter following the mortuary quarter, and, in other respects as provided under § 16.

In addition, immediately after his death, there shall be paid to the relicts entitled to pension a single benefit pro nunc to the amount of entrance fee formerly paid by the deceased, in case the reserve fund shall contain the means therefor.

§ 13. The pension shall not be reduced by any deduction, shall never be transferred to a third party in advance, and can never be attached.

§ 14. As children entitled to pension, are considered the own, legitimate children until the completed twenty-first year of life, without regard to whether they are already married or have acquired otherwise a yearly income of their own.

Children legitimized by subsequent marriage shall also be considered as legitimate children after the marriage shall have lasted for five years.

Further provisions concerning children shall apply only to children entitled to pension.

§ 15. The full title to pension on the part of the widow shall begin only after the marriage shall have lasted for one year and shall continue until her death, unless she is married again, in which event she shall have no further claim of any kind.

If the widow has not been married for a full year she shall, however, have a partial title to pension, so that after a marriage of not fully six months the widow shall receive one-fourth, from six to nine months one-half, from nine to twelve months three-fourths, of the amount of pension her husband may have insured for her.

For a posthumous child from such marriage, however, the claim to the orphan's pension shall in every case remain unreduced. Child and mother shall then receive the entire pension as long as the former shall remain entitled to pension.

The payment of the pro nunc mentioned under § 12 shall not be affected by the time of marriage.

§ 16. If a member of the Widows and Orphans' Pension Institute shall die—

- (a) Without leaving a widow and children all liability on the part of the institute with reference to him shall cease;
- (b) Leaving a widow without children, the widow shall receive the full pension as long as she shall remain in the state of widowhood;
- (c) Leaving children without a widow, the children shall receive the full pension as long as a child entitled to pension shall remain;

§ 16—Continued.

- (d) Leaving a widow and children, the widow shall receive one-half of the pension as long as she remains in the state of widowhood, and the children together the other half as long as a child entitled to pension shall remain. If there shall be no longer a child entitled to pension, or if the widow shall previously die or be again married, the remaining party shall receive the entire pension and the provisions under *b* and *c* shall then apply.

If children of different marriages should compete with the widow, and if no amicable arrangement should be made as to the distribution of the pension, the highest courts reserve decision thereon.

§ 17. The collection of the pensions shall be made at Jena against regular receipt, which receipt, with reference to the widow, shall require no further formality, but which, if she shall reside abroad, shall contain a judicial, police, or parochial certificate of life and widowhood, and which, with reference to the children, shall be signed by the guardian, and, at the first payment, also provided with the necessary certificate as to their occupation, the number of children, their names, and days of birth.

The recipients shall be permitted for their convenience to collect the pensions semiannually or annually against receipt, in such a way, however, that the advance payment shall never exceed a quarter of a year. Also such semiannual or annual payments shall not extend from one account year into another.

§ 18. The receipts of the new Widows and Orphans' Pension Institute shall consist:

- (a) Of the annual contributions and entrance fees of its members;
- (b) Of the interest from the stock capital which, under § 1, shall be transferred in its entirety from the older Widows' Institute to the new Widows and Orphans' Pension Institute, and which shall also incorporate the until now separately accumulated beadle's widows' fund against continued payment of the pensions at present allowed therefrom, and which shall be increased by every eventual surplus;
- (c) Of the interest on the invested part of the reserve fund;
- (d) Of the allowances from the academic fiscus which the latter pays in case of need for the interested parties of the new Widows and Orphans' Pension Institute to the extent indicated in further detail in § 20, without mentioning the guaranty given to the members of the older Widows' Institute in § 17 of the statutes of 1817.

§ 19. The entrance fees and the annual contributions of all new members shall be added to a reserve fund, as long as there shall be no widows of such members, in their entire amount, and, if there shall be such widows, to the amount in which they shall not be required for their pensions in the course of the fiscal year. The interest from this reserve fund shall also be incorporated in the same fund until it shall have reached 25,000 thalers.

The annual contributions of the older members, on the other hand, shall be applied as heretofore to the pensions of the widows of these members.

§ 20. If in the course of a fiscal year less than 2,500 thalers had to be added for the interested parties of the older Widows' Institute from the academic fiscus, then each time at the close of the year the less amount not required shall, instead of reverting to the academic fiscus, be paid to the new pension institute, and, in so far as it shall not be required there immediately for pension payments, be added to the reserve fund. These additional payments shall be continued, in any event, until the reserve fund shall have reached its normal amount of 25,000 thalers.

§ 21. While the institute embraces the former and the new members as a compact whole, the accounts of the institute shall be kept in three separate divisions with reference to the differences in the rights and duties of the former and the future members.

I. The division for the former members (the "older institute") shall derive the means for defraying the entire costs of administration, as well as for the pensions it may have to pay—

- (a) From the statutory contributions of its members; and
- (b) The interest of the capital fund of the combined institute (§ 1);
- (c) The remainder of the pensions not covered by these shall be paid from contributions of the academic fiscus.

II. The division for the new members (the "new institute") shall defray the pensions for which it is liable and—as soon as the "older institute" shall

have become extinct and therefore no longer defrays the entire costs of administration—its costs of administration—

- (a) From the annual contributions of the members;
- (b) In so far as it may be necessary and proper, from the contributions of the academic fiscus not required wholly or in part by the older institute to the extent provided in § 20;
- (c) From the reserve fund; and
- (d) From the interest of the stock capital of the combined institute, in so far as this may not be required by the older institute.

III. The reserve fund of the new institute shall consist—

- (a) Of the entrance fees of the members of the new institute;
- (b) Of the interest from its own capital;
- (c) Of the contributions of the academic fiscus vacated by the older institute and not reverting to the academic fiscus, and also not required for immediate pension payments by the new institute;
- (d) Of the interest of the stock capital of the combined institute, required neither by the older nor by the new institute;
- (e) Of the surplus of the annual contributions of the members remaining in the course of a fiscal year.

And shall be applied—

- (a) For the payment of the pro nunc within the limits prescribed in § 12;
- (b) For the payment of pensions without such limitation.

§ 22. Should it happen unexpectedly at some future time that—in addition to the payment of the continuing pensions incurred under the statutes of the older institute (§§ 3 and 18d)—the resources named in the previous paragraph should not be wholly sufficient to pay the widows and orphans' pensions due by the new institute, the stock capital shall not on this account be drawn upon; but, unless the highest patrons on the ground of respective university reports shall grant an extraordinary contribution from ready means of the academic fiscus, the respective additional sum required shall be assessed among the members of the Widows and Orphans' Pension Institute—with the exception of those who were already members of the older institute—in the proportion of their regular annual contributions and added to these contributions; and this assessment shall be paid by each member as long as it may be needed.

§ 23. The direction of the Widows and Orphans' Pension Institute shall be administered by the immediate commissioner (*immediat-kommissar*), appointed by the most serene patrons for the academic finance administration, and two curators to be elected by the academic senate, of whom always at least one shall be a member of the faculty of jurisprudence.

The directorship is a post of honor, which draws no pay.

§ 24. The directory shall appoint and obligate a cashier and accountant residing in Jena, who shall be domiciled there or furnish adequate bond. It shall be authorized to discharge him in its judgment, without further steps in case of unanimous decision, but under difference of opinion upon previous approval of the most serene patrons.

It shall, moreover, nominate a reviser, to be confirmed by the highest authority, who, however, shall not be subordinate to the directory, but coordinate, with only advisory vote.

§ 25. The accounts shall be closed annually on the 30th of September; submitted at the latest within four weeks to the two directors elected by the academic senate for revision and addition of a certificate as to proper deposition of the documents named in the account and as to the cash balance (§ 29) in excess of current needs; then transferred, through mediation of the academic commissioner of finance, to the reviser, who shall complete the revision and submission of the result also within four weeks.

§ 26. The accountant shall add to the account an abstract as to the condition of the institute, which after approval shall be furnished to all the members in copy and also transmitted to the interested high government authorities.

§ 27. The salary to be paid the accountant and all incidental expenses in revision fees, writing material, fees for copying, postage, etc., shall not in the aggregate exceed 100 thalers annually as a rule.

Expenses for lawsuits, eventual loss of capital or interest, or actual loss of agio (*casu* ?) shall not be included in these incidental expenses. Losses traceable to provable fault of the accountant shall be made good by him.

§ 28. With reference to care for investment and security of cash capital, for

punctual payment of interest, etc., every precaution and procedure shall be used which every good administration of accounts requires, and both the reviser and the directory shall pay very great attention to this. Arrearage of interest for more than one year shall not be permitted, or shall be placed at the risk of the accountant. No money shall be loaned out nor notice of recall given by the accountant without approval of the directory, and on notice of repayment on the part of debtors the accountant shall at once give notice thereof, with eventual proposals as to further investment.

§ 29. The documents of the Widows and Orphans' Pension Institute and cash amounts that can not be at once suitably put out on interest, but exceed by far the need for cash on hand, shall be kept in a special iron safe in the depository of the university, under triple lock of the accountant and the two curators elected by the academic senate.

§ 30. For the proper keeping of the deposits, as well as for the always correct list of the same, the three depositors named in the preceding paragraph are jointly and separately responsible to the academic fiscus, and can free themselves, therefrom only by proof, to be furnished by them, that eventual loss occurred without their fault.

IX. THE GRAND DUCAL UNIVERSITY OF MECKLENBURG, AT ROSTOCK.

PENSIONING OF THE WIDOWS AND ORPHANS OF TEACHERS AND OFFICIALS.

The pensioning of the widows and orphans of teachers and officials of the Grand Ducal University of Mecklenburg, at Rostock, is accomplished in the first place like that of all other civil officials of Mecklenburg, in accordance with the statutes, approved and promulgated under date of March 17, 1863, of the Widows' Institute for Civil and Military Officials, founded in the year 1797, in accordance with the decree of March 10, 1886, issued for the completion and modification of these statutes with regard to the pensioning of orphans.

Under these provisions the teachers and officials of the University of Rostock, in so far as they may be permanently appointed with a fixed service income of at least 100 thalers annually, like all other governmental civil officials, are obligated to take part in the said Widows' Institute, etc., and have to pay, in addition to a certificate fee and an entrance fee, a yearly contribution to the widows' fund, the amount of which is fixed in a special classification table, as a rule, at 16 per cent of the insured widow's pension, and amounts to 32 per cent of the insured widow's pension only for those members of the institute who, after retirement, have been married to a woman fifteen or more years younger.

The amount of the widow's pension is fixed in said classification table (see below, p. 240).

The surviving legitimate children or children legitimized by subsequent marriage of a teacher or official of the university, belonging at the time of his death to the Widows' Institute, receive, if there is no widow entitled to the widow's pension insured by the member, orphans' pensions which amount for each child to one-third of the pension which was insured to the father for his eventual widow at the time of his death.

The orphans' pensions, in the presence of several orphans entitled to payment, can not exceed the widow's pension secured to the father in the event of his death; in applying this limitation the orphans' pensions are proportionately reduced.

Independent from this general provision on the part of the state for the widows and orphans of teachers and officials at the university, there exists at the University of Rostock, in the first place founded in the year 1793, the widows' fund of the Rostock professors, which pursues the object of providing for the widows of the ordinary and extraordinary professors of the university a widow's pension amounting now to 500 marks annually.

Accession to this widows' fund is voluntary.

As entrance fee, each professor who wishes to join this fund has to pay 52.50 marks, and in current contributions each member has to pay annually 21 marks.

In addition to this there was founded, furthermore, in the year 1872 a university orphans' fund, which is intended for the support of surviving orphans of

ordinary and extraordinary professors, docents, and officials at the University of Rostock.

Accession to this fund, too, is voluntary. Each member pays from the time of his accession a yearly contribution of 16 marks.

Entitled to support from the orphans' fund are in the first place the fatherless and motherless orphans of members of the university who until their death had been members of the orphans' fund. Only fatherless orphans shall be (further?) entitled if after adequate consideration of the fatherless and motherless orphans the fund shall permit it.

The amount of the pensions is determined by the existing resources which, after deduction of the expenses of administration, must be applied exclusively to the object of the institution. The maximum of the pension to be paid to a single claimant is, however, fixed at 300 marks.

For the support of fatherless and motherless and also merely fatherless orphans in need of assistance, of ordinary and extraordinary professors actually appointed with salary at the university and deceased in full official activity, and for the support of such orphans left by the academic music teacher, there exists finally at the University of Rostock the Carl Friedrich von Both orphans' pension fund, which was founded by testamentary provision of vice-chancellor privy councillor Carl Friedrich von Both, and from the interest of which the said pensions are to be allowed according to the judgment of a committee of the plenary council intrusted with the administration of the fund.

THE WIDOWS' INSTITUTE FOR CIVIL AND MILITARY OFFICIALS.

The statutes of the Widows' Institute for Civil and Military Officials, of the widows' fund of Rostock professors, and of the university orphans' fund, as well as the regulations of the Carl Friedrich von Both orphans' pension fund, are as follows:

1. Statutes of the Widows' Institute for Civil and Military Officials of March 17, 1863.

FIRST SECTION: THE NATURE AND OBJECT OF THE WIDOWS' INSTITUTE, AND THE PROPERTY AND RECEIPTS THEREOF.

§ 1. The widows' institute, etc., established in 1797 and existing at present, is an individual institution, endowed with a juridical personality and the privileges of charitable institutions, with property of its own and its own administration.

Its object is to provide for the widows of government officials adequate support for their livelihood.

§ 2. The capital property accumulated and eventually to be accumulated in future for attaining and insuring the object of the institute is and shall be placed in a government fund on interest at 4 per cent, but shall never be drawn upon or reduced, especially not for the defraying of the expenses of the widows' institute.

§ 3. For the payment of the expenses of the institute there are available, in addition to extraordinary assessments, the interest of the property in capital, the payments to be made by the members of the institute and the contributions from the government.

§ 4. From the government exchequer there shall be paid to the widows' institute the contribution granted in 1846 annually of 11,666 thalers 32 florins, and besides, if in future and as long as the means assigned for the payment of the expenses of the institute should not be sufficient, an extraordinary supplementary amount, adequate to the requirement, and to be fixed in each and for that year separately.

§ 5. The institute, as a juridical person, is competent to receive gifts by testamentary provisions, by donations, or by other legal title.

SECOND SECTION: ABOUT MEMBERS OF THE WIDOWS' INSTITUTE AND THEIR RECEPTION OF A DEFINITE WIDOWS' PENSION.

§ 6. All civil and military government officials who have been appointed permanently and with a fixed service income of at least 100 thalers annually, either by His Royal Highness the Grand Duke of Mecklenburg-Schwerin or by subordinate government officers by virtue of the authority granted them, shall be entitled

and obligated to take part in the widows' institute, etc., in so far as they may not have been assigned or shall not hereafter be assigned to the Widows' Institute for Preachers and School-teachers.

Excluded from this widows' institute, therefore, are:

1. All those who are appointed without service income or who are only by way of commission or transitorily intrusted with the administration of an office;
2. The so-called workmen (*hof ouvriers*);
3. The artists accepted by the grand ducal court administration with fixed salary, but who have not received an actual appointment signed by the sovereign; and
4. All noncommissioned officers.

§ 7. The permanently appointed servants, with a fixed service income, of the members of the grand ducal family shall occupy the same position with government officials with reference to participation in the widows' institute. However—

1. The attendants of the princesses of Mecklenburg-Schwerin who are married abroad are excluded from the widows' institute; and
2. Of the attendants of the princes of Mecklenburg-Schwerin who reside chiefly abroad, only those are entitled and obligated to entrance into the widows' institute who are subjects of Mecklenburg-Schwerin.

§ 8. Furthermore, those members and subalterns of offices not belonging wholly to the home government of Mecklenburg-Schwerin who received their appointment not from His Royal Highness the Grand Duke of Mecklenburg-Schwerin or from one of his subordinate offices are entitled and obligated to participation in the widows' institute in so far as their admission has been or shall be ordered by special governmental decree.

§ 9. The admission into the widows' institute shall be made on a definite widows' pension, which shall be insured to the widows of the admitted members.

The amounts of the widows' pensions are fixed by the classification table in Appendix A.^a The admission under this classification table shall depend only on the service income personally allowed to each individual official without regard to other receipts eventually connected with the position.

Consequently, whenever a member is promoted to a higher service income, connected according to the classification table with a widow's pension higher than the one on which he had heretofore been admitted, a renewed, correspondingly higher admission shall take place.

Similarly, if an official after his admission is reduced to a salary with which the classification table connects a lower widow's pension a renewed reception on this lower widow's pension shall be made, unless the member of the institute shall declare expressly, before the administration (directory) shall have ordered the change of reception, that he wishes to keep the widow's pension heretofore insured.

§ 10. Receptions on widows' pensions other than those fixed in the classification table according to service income shall be wholly excluded, with the single exception that those officials who, according to the classification table, are entitled to a widow's pension of only 30 thalers, may be admitted on a widow's pension of 50 thalers if they request this of the administration (directory) of the widows' institute before their reception shall have been ordered.

§ 11. In the service income for the purpose of reception in the widows' institute shall be included all receipts which are allowed him as salary with the office to which he has been appointed by the government or under §§ 7 and 8. If an official shall be appointed to several such offices, the aggregate income from them shall be computed.

Moreover, it shall make no difference whether the income shall consist of cash salary, emoluments in kind, or fees. Emoluments in kind and fees shall be computed in the amount in which they shall have been computed in the salary of the official, and in cases in which this is not feasible, according to the average yield of the last five years or in accordance with a fair estimate.

On the other hand, in determining the service income for admission to the widows' institute, there shall not be counted compensation for the administration of an office conferred only provisionally or for a fixed time representation pay, compensation for official expenses, remunerations and rewards for special services, gratifications and increments of salary for a previously limited time.

^a The scale in Appendix A of the decree of March 10, 1886 (see below, p. 240), has taken the place of this Appendix A.

§ 12. For the computation and determination of the service income the office shall be competent by which the appointment of the respective official is made or which shall be ordered thereto by special decree.

In cases of reception under § 8, however, the grand ducal ministry placed over the bureau to which the respective member belongs shall determine the service income.

§ 13. The administration (directory) of the widows' institute, if it should have doubts as to the reported determination of the service income, may request further investigation by the respective bureau as well as eventually by the office placed over this.

The officials, too, who may consider themselves injured by the reported determination of their service income for reception in the widows' institute shall within the first four weeks after receiving the certificate of admission, be entitled to appeal, eventually to complaint, before the eventual higher authority.

§ 14. Reception into the widows' institute, as well as later renewed receptions due to increase or decrease of salary, shall be ordered immediately after appointment or increase or decrease of salary, respectively, and for the beginning of the Easter, summer, fall, or Christmas quarters.

§ 15. The authorities charged with the computation and determination of the service income (§ 12) shall report without delay to the administration (directory) of the widows' institute each permanent new appointment under its control stating the established service income, as well as every change of income, for the purpose of statutory reception. Similarly, every change of service and residence of the members of the institute, as well as every eventual retirement and every dismissal and discharge, shall be reported.

The officials, too, who are obligated to entrance in the widows' institute or who, because of increase of salary, are to be received again, shall be obliged—if they have not received notice of their, respectively renewed, reception within the first three months after their appointment or increase of salary—to give notice within the next three months.

§ 16. Concerning the accomplished reception into the widows' institute, as well as concerning each subsequent renewed reception, the members of the institute shall receive a certificate of reception of the form in Appendix B.

A printed copy of these statutes shall be inclosed with the certificate of reception to be issued on reception into the widows' institute.

§ 17. Members of the widows' institute shall not be allowed to withdraw of their free will from the widows' institute as long as they shall be in the service of the state or in a service which fits them for reception under §§ 7 and 8 of these statutes.

§ 18. Officials who shall be retired with pension—

1. Shall continue as members of the widows' institute if and as long as they shall be married, according to their free choice, to be made within six weeks after their retirement, on the widows' pension insured to them up to their retirement or on a widow's pension corresponding with the amount of their service pension according to the classification table.
2. Members of the institute who at the time of their retirement shall be unmarried may at their choice withdraw from the widows' institute or continue therein, but only on a widow's pension corresponding with their service pension.
3. Similarly, members of the institute who were married at the time of their retirement, but who subsequently shall have lost the wife by death or divorce, shall be at liberty to withdraw from the widows' institute. They may continue as members, but only on a widow's pension corresponding with their service pension.
4. Moreover, pensioned members of the institute who shall be married after their retirement shall notify the administration (directory) of the widows' institute within six weeks of their marriage, with submission of the certificate of birth of the wife.

§ 19. The members of the widows' institute who withdraw from the service voluntarily and without pension may preserve their connection with the widows' institute in the interest of their wives and during the life of the latter, respectively, until eventual divorce; but they shall notify the administration (directory) of the widows' institute of their intention in this respect within six weeks.

§ 20. Members of the widows' institute who are deprived of their office or dismissed on account of crimes committed by them, on account of misdemeanor of service, or for any other reason, shall thereby also be separated from the institute. Only if they shall have been in the service for at least ten years and shall

be married, and if their wives shall have had no part in the crime or misdemeanor that caused the dismissal or discharge, they shall be at liberty to continue in the widows' institute for the benefit of their wives and for the lifetime of the latter, respectively, until eventual divorce. However, they shall be obliged to give notice of their continuance to the administration (directory) of the widows' institute within six weeks after their dismissal or discharge.

§ 21. Members of the institute who shall enter foreign service shall thereby be immediately separated from the widows' institute, even though they may continue to draw a service pension from their service in Mecklenburg-Schwerin.

The same shall apply to the attendants of a prince of Mecklenburg who may have his chief residence abroad, and who (the attendants) may become subjects of a foreign government.

§ 22. The administration (directory) of the widows' institute shall have the authority to exclude from the institute:

1. Members of the institute who shall have remained in arrear with the payments due from them to the widows' institute for a year, and from whom the arrearages can not be collected in the ways to be subsequently provided in these statutes; and
2. Members of the institute who shall have removed from their residence and after removal shall have failed to notify the administration (directory) of the widows' institute of their residence as soon as the competent service bureau shall have withdrawn their salary.

§ 23. Former members of the institute who shall have withdrawn from the widows' institute under §§ 18 to 21, or shall have been excluded therefrom under § 22, shall be received again as soon as they shall enter again some official relation which entitles or obligates to participation in the widows' institute, and (shall be received) on a widow's pension corresponding with their service income.

Members of the institute who were excluded on account of absence (§ 22, No. 2) shall be received again at their request, even when not returning into an official relation, if they were absent against their will.

THIRD SECTION: PAYMENTS OF MEMBERS TO THE INSTITUTE.

§ 24. The members of the institute shall pay to the widows' institute—

1. A certificate fee for reception into the institute;
2. An entrance fee; and
3. A yearly contribution to the widows' fund.

§ 25. The certificate fee shall be assessed on issue of the certificate of reception at one thaler for each one hundred of the insured widow's pension, with subsequent renewed receptions, however, only on the amount of increase in the widow's pension.

§ 26. As entrance fee the contribution to the widows' fund for half a year shall be paid also on receipt (issue) of the certificate of reception.

For renewed receptions entrance fee shall be paid only on the amount of increase in the widow's pension.

§ 27. Members of the institute who had been separated from the widows' institute shall, on readmission, and in so far as they may be obligated to pay arrearage of contributions to the widows' fund, pay the certificate fee and the entrance fee only on the eventual increase in the amount of the widow's pension, but otherwise the full certificate fee and the full entrance fee.

§ 28. Institute members who shall be transferred from the Widows' Institute for Preachers and School Teachers to the Widows' Institute for Civil and Military Officials shall on reception into the latter be credited with the amount of entrance money paid to the former.

§ 29. The amount of the yearly contribution to the widows' fund has been fixed in the classification table appended to § 9, above, at 16 per cent of the insured widow's pension.

§ 30. Institute members who after their retirement with pension shall marry a woman younger by fifteen or more years shall pay, beginning with the quarter in which they were married, a contribution to the widows' fund of 32 per cent of the widow's pension insured by them.

§ 31. (Treats of the contributions to the widows' fund and the entrance fees of unmarried officers and military officials down to the rank of a first lieutenant.)

§ 32. Institute members who shall have withdrawn with pension from the service and also from the widows' institute shall, on their reentrance of the service, pay the contribution to the widows' fund corresponding with their pen-

sion for the time from their withdrawal from the widows' institute to the quarter year when they reentered, with compound interest at 4 per cent.

§ 33. The contributions to the widows' fund shall be paid in quarterly installments, in advance, from the day on which the reception of the individual member is fixed in the certificate of reception to the end of the quarter year in which the institute member shall have withdrawn, or, if not previously withdrawn, has died; in these cases, however, in which the widow and children or the heirs of the deceased institute member are entitled to or allowed a gratuity period until the end of such period.

§ 34. The statutory certificate fees, entrance fees, and contributions to the widows' fund shall, without exception, belong to the widows' institute after payment and shall never be returned, nor shall they be remitted under any circumstances to those who owe them wholly or in part, even by Government decree.

The same applies to the arrearage payments under §§ 31 and 32.

FOURTH SECTION: WIDOWS' PENSIONS AND THEIR COLLECTION.

§ 35. The widows' pensions insured for the institute members shall be paid only and exclusively to the widows to whom these members were married until their death.

The widow entitled to pension shall receive the widow's pension insured to her husband at his death.

But also in the event that an official entitled to participation in the widows' institute had not been received, or not received a higher rate, his widow shall be awarded the widow's pension which would have had to be insured for her deceased husband on payment of the fees which he would have had to pay on his reception in the widows' institute, or on his reception at a higher rate, until his death, provided that between the beginning of his title to reception and his death not more than six months shall have elapsed.

§ 36. The widow of an institute member who died within a year after conclusion of marriage shall have claim to the payment of the widow's pension only if she can show by the certificate of a physician that her husband at the time of his marriage did not suffer from a disease, ailment, or other bodily weakness in general which presaged his early death.

§ 37. The widow entitled to payment shall, within the quarter in which her husband died, prove to the administration (directory) of the widows' institute the death of said husband, on returning the last certificate of reception issued to him, by a certificate of death, and shall produce on request an official certificate (showing) that she was married to the deceased until his death.

Furthermore, if the deceased institute member had taken up his residence in a foreign country, or if he stood in the service of a prince of Mecklenburg-Schwerin, residing essentially abroad, it shall be proved on request by a certificate of the government of his last residence that he had not entered foreign service, respectively that he had not become a foreign subject.

§ 38. Widows who did not already live abroad at the death of the husband whom his official position compelled to reside abroad, and who only after the beginning of their widowhood take up their residence abroad, or who—if the husband of his own free will resided abroad—retain such residence, shall lose their claim to the widow's pension otherwise due them for the time of their residence abroad.

Nevertheless, in the presence of cogent reasons, the payment of the widow's pension into foreign parts may be awarded exceptionally under government dispensation, according to decision against a deduction therefrom up to 25 per cent.

§ 39. The payment of the widow's pension shall begin with the end of the quarter—respectively, in case of monthly payment of salary, of the month—in which the death of the institute member occurred, and shall be paid in quarterly installments at the beginning of the Easter, summer, fall, and Christmas quarters in advance. In the event, however, that the widow of the deceased, whether alone or together with the children and other heirs of her deceased husband, is entitled to or has awarded to her a gratuity period, [payment shall begin] with the end of that period. However, eventual arrears of contributions to the widows' fund shall first be deducted under decision of the administration (directory) of the widows' institute.

§ 40. The widow's pension shall be paid only to the widow entitled to payment, or to her curator or special attorney, or, in the event that a pension already due at her death should not have been collected, to her heirs, to be regularly legitimized, or to their special attorney.

Assignments, cessions, attachment, and seizures of widows' pensions are wholly inadmissible and not to be considered.

§ 41. For the purpose of collecting the installment of her widow's pension, the widow entitled thereto shall submit at the beginning of each quarter for the fund of the widows' institute a receipt drawn by her own hands, after the form in Appendix C.

The receipt shall not be signed before the first day of the quarter for which it is drawn and shall contain under the signature of the widow who has drawn it the certificate of the local magistracy or the local preacher that she lives at the respective place in widowhood.

§ 42. The claim to widow's pension shall cease—

1. With the death of the widow;
2. Unconditionally and forever with her marriage to another husband; so that the last payment shall be made for the quarter in which she shall have died or shall have remarried.

§ 43. The widow's pension shall be forever withdrawn—

1. If the widow shall have been legally convicted by court of the crime of intentionally killing her husband or of complicity in such crime;
2. Under decision and judgment of the administration (directory) of the widows' institute if, in the certificates and receipts to be statutorily submitted for collection of the widow's pension, false statements shall have been made by the widow herself, or with her knowledge, for the purpose of surreptitiously obtaining the payment of the widow's pension.

FIFTH SECTION: THE DIRECTORY AND ADMINISTRATION OF THE WIDOWS' INSTITUTE.

§ 44. The widows' institute shall have its own directory of at least three and at most five members, of whom the oldest member shall always occupy the chair.

The members of the directory shall be appointed by the sovereign from the higher administrative boards in Schwerin, and shall be placed under oath at their installment therein.

In so far as the legal affairs of the widows' institute are concerned, these (members) are released from the obligations by which they are otherwise bound to the sovereign.

They shall perform their duties without pay.

§ 45. The directory shall have the independent administration of the widows' institute in its entire compass and under the provisions of these statutes, yet under the supervision of the sovereign.

Especially there belongs to the duties of the directory the care for the regular administration and computation of the widows' institute fund, established for the collection of all revenues and for the payment of all expenses of the widows' institute.

§ 46. The computer for the administration of the widows' institute fund and the required employees for the duties of secretaryship, registry, and subordinate matters shall be appointed under the directory and upon its nomination by the sovereign through the grand ducal ministry placed over the directory.

The computer and the remaining subalterns shall receive a suitable salary from the widows' institute fund, to be fixed by the sovereign.

The computer who, like the other appointed subalterns, shall be put under oath, shall furnish cash security, the amount of which shall be fixed by the authorized grand ducal ministry.

§ 47. The computer shall administer and compute the institute fund under the provisions of the law concerning the administration of public funds and in accordance with instructions to be given him by the directory; therefore he shall collect all revenues and pay all expenses of the institute, also submit annually to the directory a formal account and at the same time a complete survey of the condition of the property and fund of the widows' institute.

This survey of the property and fund shall be submitted by the directory to the authorized grand ducal ministry and upon order of the latter published in print.

§ 48. Investments of capital and loans for the widows' institute shall be made by the computer only under order and approval of the directory.

The securities concerning invested capitals shall be submitted by him to the directory and by this to the authorized grand ducal ministry, which shall issue a certificate as to their receipt.

§ 49. The computer shall see to it that the certificate fees, the entrance fees, and the contributions to the widows' fund, which he shall receive directly from those who owe them, or from the authorities commissioned to collect them, in fixed districts, shall be paid at the proper time. Eventual arrearages he shall, without delay, cause to be collected after three days' warning by executory process, by virtue of the executory power with which the widows' institute is invested generally and without regard to the jurisdiction (*Gerichtsstand*) of the several members of the institute.

§ 50. In the event not only that the executory process instituted under § 49 fails to lead to the payment of the widows' institute, but in general if the directory deems it desirable in its interest, the authorized grand ducal ministry shall, upon report of the directory, bring it about that the arrearages and future dues to the widows' institute shall be retained by the respective authorities from the salary or pension of the debtors or from the mortuary gratuities and gratuity quarters (*Gnaden-quartale*) and remitted to the widows' fund.

With reference to the moneys thus retained the widows' fund precedes unconditionally all other claims, so that these moneys can under no circumstances be withheld or taken away from it.

§ 51. The directory uses in the execution of its papers the seal conferred upon it. The widows' institute fund has also been furnished a seal for its papers.

§ 52. The directory and the widows' institute fund have been invested with the franking privilege within the limits of Mecklenburg-Schwerin for all dispatches and money remittances closed with their seals and furnished with the superscription "Widows' institute matter." Also money remittances and receipts addressed to the widows' institute fund, with the superscription "Widows' institute contributions" and "Widows' institute receipts," respectively, and shall be carried free of postage within the limits of Mecklenburg-Schwerin.

All mail matter, however, addressed to the widows' institute, the directory, and the fund thereof, for which freedom from postage has not been allowed, must be stamped on penalty of its return.

§ 53. Eventual complaints concerning the management of the computer shall be submitted to the directory.

Complaints as to the management, orders, directions, and decisions of the directory, however, are to be made to the authorized grand ducal ministry, whose decision shall be final. Juridical process is not granted in any case.

2. *Decree of March 10, 1886, supplementing and modifying the statutes, respectively, for the Widows' Institute for Civil and Military Officials of March 17, 1863, and for the Widows' Institute for Preachers, Organists, etc., of January 21, 1864.*

Article I.—The surviving legitimate children or children legitimized by subsequent marriage of a member belonging at the time of his death to the Widows' Institute for Civil and Military Officials or to the Widows' Institute for Preachers, Organists, etc., shall receive, in the event if there is present no widow entitled to the payment of the widow's pension insured for the member, from the fund of the widows' institute to which their father belonged, orphans' pension under the following provisions:

§ 1. The orphan's pension shall carry for each child one-third of the pension which was insured to the father at the time of his death for his eventual widow.

§ 2. The orphan's pension in the presence of several children entitled to payment shall not exceed the widow's pension insured to the member at the time of his death.

In applying this provision the orphans' pensions shall be proportionately reduced.

§ 3. On the elimination of one of the orphans entitled to pension, the orphans' pensions of the remaining claimants shall be increased, beginning with the next following quarter, in so far as they are not as yet in the full enjoyment of the amounts due them under § 1.

§ 4. The payment of the orphans' pensions shall begin with the end of the gratuity period, respectively, with the end of the time for which the widow's pension has been paid to a surviving widow of the respective member.

§ 5. Orphans' pensions shall be paid quarterly in advance.

§ 6. The claim to the payment of orphans' pensions shall become extinct—

1. For each claimant with the end of the quarter in which he dies or is married;
2. For each orphan, moreover, with the end of the quarter in which he or she shall complete the eighteenth year of life.

§ 7. The right to the payment of orphans' pension shall be suspended—

1. If the claimant loses German citizenship, until its eventual recovery;
2. If before this decree shall take effect the claimant shall have been allowed gratuity pension from the fund of the sovereign to the amount of such gratuity pension and during the time of such allowance.

§ 8. The request for payment of orphans' pension shall be made to the directory of the widows' institute liable for payment by the guardianship, which shall establish its legitimacy and submit the certificates of birth of the orphans entitled to payment.

§ 9. In addition to the above provisions, the provisions of the statutes of the two widows' institutes shall have corresponding application.

Article II.—For Appendix A of the statutes of the Widows' Institute for Civil and Military Officials of March 17, 1863, Appendix A of this decree shall be substituted.

Article III.—The present decree shall take effect on the day of its promulgation with the proviso that the members of the widows' institutes received before that day shall have the right to request of the directory of the widows' institute their new reception under Appendices A and B until July 1 of this year, but that the new reception shall be dated on April 1 of this year.

APPENDIX A.—*Classification table of the Widows' Institute for Civil and Military Officials.*

Salaries.	Insured widows' pensions.	Annual contributions.	Entrance fees.	Certificate fees.
From—	Marks.	Marks.	Marks.	M. pfgr.
300 to 399 marks.....	75	12	6	0 75
400 to 499 marks.....	100	16	8	1 0
500 to 599 marks.....	125	20	10	1 25
600 to 699 marks.....	150	24	12	1 50
700 to 799 marks.....	175	28	14	1 75
800 to 899 marks.....	200	32	16	2 0
900 to 999 marks.....	225	36	18	2 25
1,000 to 1,099 marks.....	250	40	20	2 50
1,100 to 1,199 marks.....	275	44	22	2 75
1,200 to 1,299 marks.....	300	48	24	3 0
1,300 to 1,399 marks.....	325	52	26	3 25
1,400 to 1,499 marks.....	350	56	28	3 50
1,500 to 1,599 marks.....	375	60	30	3 75
1,600 to 1,699 marks.....	400	64	32	4 0
1,700 to 1,799 marks.....	425	68	34	4 25
1,800 to 1,899 marks.....	450	72	36	4 50
1,900 to 1,999 marks.....	475	76	38	4 75
2,000 to 2,099 marks.....	500	80	40	5 0
2,100 to 2,199 marks.....	525	84	42	5 25
2,200 to 2,299 marks.....	550	88	44	5 50
2,300 to 2,399 marks.....	575	92	46	5 75
2,400 to 2,499 marks.....	600	96	48	6 0
2,500 to 2,599 marks.....	625	100	50	6 25
2,600 to 2,699 marks.....	650	104	52	6 50
2,700 to 2,799 marks.....	675	108	54	6 75
2,800 to 2,899 marks.....	700	112	56	7 0
2,900 to 2,999 marks.....	725	116	58	7 25
3,000 to 3,099 marks.....	750	120	60	7 50
3,100 to 3,199 marks.....	775	124	62	7 75
3,200 to 3,299 marks.....	800	128	64	8 0
3,300 to 3,399 marks.....	825	132	66	8 25
3,400 to 3,499 marks.....	850	136	68	8 50
3,500 to 3,599 marks.....	875	140	70	8 75
3,600 to 3,699 marks.....	900	144	72	9 0
3,700 to 3,799 marks.....	925	148	74	9 25
3,800 to 3,899 marks.....	950	152	76	9 50
3,900 to 3,999 marks.....	975	156	78	10 75
4,000 to 4,099 marks.....	1,000	160	80	10 0
4,100 to 4,199 marks.....	1,025	164	82	10 25
4,200 to 4,299 marks.....	1,050	168	84	10 50
4,300 to 4,399 marks.....	1,075	172	86	11 75
4,400 to 4,499 marks.....	1,100	176	88	11 0
4,500 to 4,599 marks.....	1,125	180	90	11 25
4,600 to 4,699 marks.....	1,150	184	92	11 50
4,700 to 4,799 marks.....	1,175	188	94	12 75
4,800 to 4,899 marks.....	1,200	192	96	12 0
4,900 to 4,999 marks.....	1,225	196	98	12 25
5,000 to 5,099 marks.....	1,250	200	100	12 50
5,100 to 5,199 marks.....	1,275	204	102	13 75
5,200 to 5,299 marks.....	1,300	208	104	13 25
5,300 to 5,399 marks.....	1,325	212	106	13 50

APPENDIX A.—*Classification table of the Widows' Institute for Civil and Military Officials—Continued.*

Salaries.	Insured widows' pensions.	Annual contri- butions.	En- trance fees.	Certi- ficate fees.
From—	Marks.	Marks.	Marks.	M. pfy.
5,400 to 5,499 marks	1,350	216	108	13 50
5,500 to 5,599 marks	1,375	220	110	13 75
5,600 to 5,699 marks	1,400	224	112	14 0
5,700 to 5,799 marks	1,425	228	114	14 25
5,800 to 5,899 marks	1,450	232	116	14 50
5,900 to 5,999 marks	1,475	240	118	14 75
7,000 to 7,499 marks	1,500	248	120	15 0
7,500 to 7,999 marks	1,600	256	132	16 50
8,000 to 8,499 marks	1,700	272	136	17 0
8,500 to 8,999 marks	1,750	280	140	17 50
9,000 to 9,499 marks	1,800	288	144	18 0
9,500 to 9,999 marks	1,850	296	148	18 50
10,000 to 10,499 marks	1,900	304	152	19 0
10,500 to 10,999 marks	1,950	312	156	19 50
11,000 to 11,499 marks	2,000	320	160	20 0
11,500 to 11,999 marks	2,050	328	164	20 50
12,000 to 12,499 marks	2,100	336	168	21 0
12,500 to 12,999 marks	2,150	344	172	21 50
13,000 to 13,499 marks	2,200	352	176	22 0
13,500 to 13,999 marks	2,250	360	180	22 50
14,000 to 14,499 marks	2,300	368	184	23 0
14,500 to 14,999 marks	2,350	376	188	23 50
15,000 marks and over	2,400	384	192	24 0

3. *Regulations for the widows' fund of Rostock professors of December 30, 1793.^a*

When the deceased wife of Doctor and Syndicus Spalding in a legacy donated for the foundation of a widows' fund for the professors of the Academy of Rostock 300 rix-dollar new two-thirds (*reichsthaler n. zweydr.*), and this money reached us during the past term of Antonius (*Antonii-Termin*), although because of complication of legacy moneys in the Bernard debit suit, at the time with a deduction of 30 rix-dollars; this furnished the occasion to the rector and council of the Rostock Academy for the establishment of such a special widows' fund for Rostock professors, and we were pleased to issue the following regulations for this institute:

1. This widows' fund, on the basis of that testamentary provision, is established only for actual professors of the Rostock Academy, both ordinary and extraordinary. Whosoever, therefore, wishes to take part in it must at the time of his accession be a Rostock professor; whosoever is not (a Rostock professor) can not be admitted even with the consent of all the members.

2. It shall depend, however, on the free will of each professor whether or not he will take part in this widows' fund. From the present professors the decision thereon and the payment of the entrance fee is expected before January 31 of next year. And the professors to be appointed hereafter shall announce their decision thereon within three months from the day of their reception into the council (*concilium*) or into the college (*collegium*) of all the professors. This term provision shall extend also to unmarried professors and shall not be changed by delay of their marriage.

3. Those professors, however, who did not join the association at the time fixed above shall be admitted also subsequently if, at the time, they shall not have passed the fiftieth year of life, and if they pay in cash, with 5 per cent interest, all they would have had to pay up to that time in entrance fee and yearly contributions if they had joined at the usual time. Also these professors who may join later on shall certify through a certificate made by their regular physician under oath that they are not afflicted with a disease or ailment which justifies the apprehension of an early death, but, rather, are in such condition that they can attend to their duties.

4. On admission, if this shall take place at the establishment of the association or, in future, within three months after reception (at the university—Tr.)

^a These regulations were confirmed by sovereign decree of January 8, 1874.

15 reichsthaler neue zweydr. shall be paid in cash;^a and, subsequently, each member shall, as long as he lives, pay an additional contribution annually of 6 reichsthaler neue zweydr.^b in quarterly installments, which shall be paid on the 1st of January, April, July, and October. Beyond this no payments shall be required except that, for partial equalization of those who shall receive the position of a Rostock professor at a later age, whether they be married or not at the time of admission, these shall pay as much admission fee as the entrance fees and annual contributions, with interest, from the end of the fortieth year of their age would have carried. They may, however, be admitted on this payment, even if they shall have passed the fiftieth year of life, in so far as they shall give notice within three months after their reception (into the university).

5. The money received from admission fees and contributions, with interest thereon, paid by the members obligated thereto under §§ 3 and 4 shall, as soon as a sufficient sum shall have been accumulated, be invested on interest in order to distribute, subsequently, among the existing widows, and after deduction of the necessary expenses, the interest of these capitals and of the legacy of 300 reichsthaler. No other use can be made of this interest, excepting the case noted under § 16, even on unanimous consent of all the members.

6. The annual contributions shall be promptly paid at the stated times. Whoever shall fail to pay at the stated time shall pay in addition to the arrearage in the first half year, after due time, one-half the arrearage and in the second half year an amount equal to the arrearage. As soon, however, as a contribution shall have remained unpaid for more than one year, the dilatory member shall be thereby ipso facto excluded from the association and then not entitled to demand recovery of any portion of the payments made heretofore.

7. Each member may leave the association at his pleasure; only he shall give written notice of his desire to the administration. He can, however, then also not demand any restoration of the payments heretofore made by him. On the other hand, the member who shall have resigned at his own free desire shall, subsequently, if he shall request it, be again admitted, if he is not yet over 50 years old and if he shall submit the above-mentioned certificate of his physician. He shall then, however, be treated as a wholly new member, and can not in any way receive credit for his former admission fee and contributions.

8. If a member ceases to be a Rostock professor, his share in this widows' fund shall become extinct, and he shall not be entitled to demand restoration of the payments heretofore made by him.

9. On account of the small number of members and of inequality of accession, it has [not (?)—Tr.] been possible now to declare a fixed dividend for the widows. For the present, therefore, the entire income in interest from invested capitals, after deduction of the necessary expenses, shall be distributed among the widows in such a way that all the existing widows shall receive equal shares. If, however, in future a widow should be entitled to receive more than 100 reichsthaler new two-thirds^c annually, then for the sake of greater uniformity another distribution of widows' pensions shall be arranged. Yet even then the interest from the invested capital shall not be applied to any purpose other than the distribution among the widows and the increase of capital; and the first arrangement shall again be restored if experience should show that the changed arrangement can not continue.

10. No widow can claim payment unless her husband shall have been member of this association for a full year after his admission. Should he die sooner, only the admission fee and the paid contributions, but without interest, shall be returned to her.

11. In the distribution of interest among the widows the following principles shall be observed:

- (a) Each widow who is living after June 30 attains thereby for herself and her heirs a claim to that interest which shall have become due in the past year, which for this institute shall always be counted from July 1 to June 30.
- (b) However, this shall suffer an exception for the year in which the husband died, inasmuch as the widow shall not share at all in the interest due for that year.
- (c) On the other hand, the heirs of the widow shall share in all the interest due until the last of June for the year in which she shall have died.

^a Now 52.50 marks.

^b Now 21 marks.

^c Now 300 marks.

11—Continued.

- (d) Interest which is not paid at the time due, but is subsequently paid, shall belong to those widows and their heirs who were entitled to them at the time they were actually due, after deduction of the expenses of their collection, if these expenses are not paid by the debtor. However, the widows and their heirs—
- (e) Shall unconditionally abide by whatever steps may be decided upon concerning the collection of such debts, especially in bankruptcy cases, and even in case of an agreement for the purpose of expediting the matter and saving costs, in which (agreement) interest may be remitted.
- (f) Moreover, no widow can demand that a capital, of the return of which the debtor shall have given notice or which shall have been called in by the administrator shall be invested again so that the interest may become due in the same term in which they had become due heretofore.

12. The quota, computed on these principles by the administration, shall be distributed among the widows at the end of June, and their receipt shall be acknowledged by the widows present at Rostock in a special receipt book and by those not present in accordance with a printed form.

13. A widow living outside of Rostock shall appoint an attorney at Rostock, who shall receive the receipt sent him by the administrator, attend to its legalization, and afterwards exchange it for the money. Moreover, such an absent widow shall draw her receipt before a notary and two witnesses and certify in the document her continued widowhood.

14. If a widow is married again her share in this institute is wholly extinguished, and she shall receive her quota for the year in which her marriage shall take place at the end of June for the last time. However, she shall retain her claim to the interest become due in the previous terms but not payable. She shall not be admitted again after the death of her second husband, unless eventually he, too, was a professor and member of the association.

15. If the husband voluntarily resigned or was excluded from the association for nonpayment of dues, the widow can not demand that she be reinstated in integrum, whatsoever special facts she may adduce for this purpose.

16. Should at any time no widows be present the interest for such a year, after deduction of expenses, shall be added to the capital, and a widow becoming entitled in the following year shall have no claim on the revenue of past years.

17. The administration of this widows' fund shall be in the hands of the professors who participate in it. The first administrator shall be elected out of regular sequence and for an indefinite time, inasmuch as the first organization presupposes some knowledge of similar associations and might require a longer period. Afterwards an administration shall always last for two years and the administrator shall be chosen from the members of the association in the order of their reception into the council (concilium). If the administrator should die during the period of his administration, his predecessor shall again conduct the administration until the close of the year and secure the delivery of the cash on hand and other documents and matters belonging to the widows' fund as soon as possible. Also, in the event of sickness and other detention, the predecessor assumes, temporarily, all business affairs.

18. The administration shall change on Michaelmas Day, and shall be conducted by the parties concerned free of charge. The administrator shall collect the admission fees and shall issue the certificate of admission. He shall cause the collection of the quarterly contributions and shall collect the interest. The former he shall lay by safely until they can be made into a capital, and the latter he distributes at the close of the year. Should any event require it, he shall notify the association in notices and meetings, and shall carry out, whenever necessary, their resolutions, in which plurality shall decide, but which can not change the regulations.

19. Concerning the investment of capital amounts, resolutions shall be passed in the same manner, but the association shall be subject in this to the consent of the entire council (concilium), which shall be conducted after the same principles that apply to the investment of academic funds. The members of the association who have a vote in the council shall retain herein their usual vote.

20. Within the first two weeks after Michaelmas Day the administrator shall circulate among the members of the association his account, which, under the above principles, shall be divided into a capital account and an interest account,

for their inspection and eventual amendment, and each member shall attend to this inspection and amendment as soon as possible, within not more than eight days. If these terms are not observed, the administrator shall be held to a fine in the amount of an annual contribution, and other parties concerned in the amount of a semiannual contribution to the fund. Then the account shall be received and acquitted by the rector and the council of the academy like other academic accounts.

21. For the assistance of the administrator a monitor shall be appointed, who shall collect the contributions and the interest, deliver the quotas of the widows to these or to their attorneys, and attend to all matters of business generally. He shall be elected by the association, but can be dismissed again at any time if the association is not satisfied with him. In the election the academic bedels shall be considered in preference. As his salary, 4 reichsthaler, *new two-thirds*, are at present appropriated for him. With the increase of the fund, however, this sum may be somewhat increased.

22. In order to comply punctually with the intention of the wife of Syndicus Spalding, and in order to ease the mind of each member and his widow, it is further ordered herewith that the purpose of this fund, even with unanimous approval of all its members, shall not be changed and that this shall forever remain an independent institute. Even if the improbable event should occur that at some time no members should be present, the institute shall nevertheless continue, and the rector and council shall then assume its administration interimistically under these regulations until again there shall be three members, to whom the administration shall then revert.

4. Statutes of the university orphans' fund of July 16, 1872.^a

§ 1. The orphans' fund is established for the benefit of surviving orphans of ordinary and extraordinary professors, docents, and officials of the University of Rostock. Only a person belonging at the time to the University of Rostock shall be entitled to membership.

§ 2. Accession to the orphans' fund shall be voluntary. From the persons at present belonging to the University of Rostock declaration on this point will be expected on or before August 15 of this year. In future those entitled to membership shall submit their declaration within three months after their accession to their position in the University of Rostock.

§ 3. Persons, however, belonging to the university, who may not have joined the orphans' fund at the time stipulated above, shall still be admitted subsequently if they shall pay, with 5 per cent annual interest in cash, all they would have had to pay up to the time in admission fee and yearly contributions if they had joined at the stipulated time.

§ 4. Each member shall pay annually from the time of his accession a contribution of 16 marks, in quarterly installments, on the 1st of January, April, July, and October. From the time when the property of the orphans' fund shall have reached 3,000 marks new members shall pay in addition an entrance fee of 10 marks.

§ 5. Each member can resign at pleasure, but for the purpose of release from further obligations a written notice to the administrator shall be required. In such event there shall exist no claim to return of payments made heretofore. The person who has resigned voluntarily shall, however, subsequently, if he requests it, be readmitted, but shall then be held to make subsequent payment of the contributions that may have become due for the time during which he was not a member, with 5 per cent annual interest.

§ 6. If a member ceases to be professor, docent, or official of the University of Rostock, his share in the orphans' fund shall also cease, and he shall have no claim to demand return of his payments. Retirement with whole or partial retention of salary shall not be considered as cessation of the required qualification of membership. Besides, a person who for one year shall have failed to pay his contributions shall cease ipso facto to be member of the institute from the day on which he shall receive notice thereof from the administrator of the fund. As a matter of course the separated member shall remain responsible for the payment of the four quarterly contributions left unpaid.

^a These statutes were approved by the sovereign under date of August 22, 1872.

§ 7. The contributions, admission fees, and all other benefits accruing to the orphans' fund, as well as the interest of the capital fund, shall be added to the capital until this shall have reached 3,000 marks. Only from and after this time the revenues of the fund shall be available as benefits for orphans under the provisions below.

§ 8. Entitled to benefit from the orphans' fund are, in the first place, fatherless and motherless orphans of persons belonging to the university who were members of the orphans' fund until their death. Only if after sufficient consideration of these the fund shall permit, merely fatherless orphans of former members shall acquire claim. The pension is intended to be used for the education of the orphans and shall cease, as a rule, when this shall have been completed. Only in the event of special reasons, and if the condition of the fund shall permit this without infringement on the claims of other orphans, older orphans shall have a claim to pension. The investigation of the circumstances shall belong to the administration of the fund. However, against its decision appeal to the rector and concilium shall be permitted. This appeal shall be submitted to the rector within four weeks after receipt of the decision of the administration, to be given in writing, on penalty of definitive refusal. The decision of the concilium shall be made with the generally established rules for conciliary decisions under the academic statutes. However, the provision of § 19 of the academic statutes shall not apply in this case.

§ 9. The amount of the pensions shall be determined by the available means, which, after deduction of the expenses of administration, are to be applied exclusively to the purpose of the institute. (Compare above § 7.) Should, however, such application yield for one claimant 300 marks or more, then the sum of 300 marks shall stand as a maximum of the pension due and the excess shall be applied to the increase of the capital.

§ 10. The administration of the orphans' fund shall be conducted by the members themselves, and in such a way that for every four years one member shall be constituted as administrator. The election shall be made at a meeting to which all the members shall be called in writing by the administrator in office, and by absolute majority. If such majority shall not be obtained on the first ballot, further proceedings shall be under the provisions for the election of rector in the general academic statutes.

Each member shall be obliged to accept election, but not reelection. Should the administration become vacant in the course of the statutory time by death or resignation of the administrator, there shall be held immediately, on motion to be made by the predecessor of the administrator, a new election for the remaining time of the statutory term. In temporary detentions of the administrator his predecessor, eventually the predecessor of the latter, etc., shall officiate for the time of detention.

§ 11. The administrator shall determine in case of notice of accession whether the statutory requisites exist, then notify the association of the accession, draw up the certificate of admission, and eventually (see § 4) collect the admission fee. The administrator shall, furthermore, collect the quarterly contributions from all the members and the interest from invested capitals, finally receive, eventually, other donations to the fund, and give receipt therefor.

§ 12. The investment, recall, and cession of capitals, for which, as for all other money transactions for the fund, he shall be considered legitimized by his election, shall be within the authority of the administrator; however, he shall be subject therein to the approval of two members of the orphans' fund, elected by the council. In such decision the same principles shall be observed with reference to the required security which regulate the investment of academic moneys. The defeated minority in such decisions shall have appeal to the rector and concilium, whose decision shall be final in every case.

§ 13. Within two weeks after July 1 the administrator shall submit in a circular his account to the members for revision and correction, respectively. This revision and correction shall be completed by each individual member within at most eight days. If these terms shall be neglected, the administrator shall be held to the payment of a fine into the fund equal to an annual contribution, and each member to such fine equal to a semiannual contribution. After accomplished approval of the account by the association, it shall be submitted to the rector and concilium and here, like every other academic account, received and acknowledged.

§ 14. As assistant for the administrator a monitor may be elected by the association, on momentary notice and with a yearly pay of at most 10 marks, who shall attend to the collection, contributions, payments, etc.

§ 15. In the event that at some time there should be no members, the rector and concilium shall assume the administration under these statutes until there shall be again three members, to whom then the administration shall be transferred.

These statutes, which shall be handed, in print, to each member on his admission into the association, have been drawn up in documentary form over the signature of the rector at the time and with the seal of the university affixed, and highest sovereign confirmation thereof shall be requested.

5. Regulations concerning the administration and use of the orphans' pension fund of the University of Rostock.^a

§ 1. The pension fund has been established for fatherless and motherless, as well as merely fatherless, orphans needing assistance, of ordinary and extraordinary professors, actually appointed under salary and deceased in full official activity, and also for the above-designated surviving orphans of the academic music teacher.

§ 2. There shall be excluded, therefore, the children of such university teachers as occupy the professorship merely as a secondary office, as well as of those professors who in the last two years before their death have delivered no lectures without being hindered therein by sickness, to be attested by a physician's certificate, or by other causes, to be adequately established.

§ 3. The pensions shall be paid only from the interest of the capital fund. The latter shall never be drawn upon. The surplus of receipts over expenditures shall be capitalized and invested on interest on unquestioned security.

§ 4. The pension to be paid to the guardianship of the orphan shall cease—

1. If a son shall have completed the twenty-third year;
2. If, although younger, he is already provided for by earning his own support;
3. If a daughter shall have completed the twenty-first year;
4. If she shall be married before that time; or
5. If the child shall lead a scandalous life and shall not desist therefrom after one serious admonition from the chairman of the administration committee (§ 10). If such admonition shall have been made by the father before his death, which fact it would not be difficult to establish, the respective child shall have no claim to pension if it shall already have passed the sixteenth year.

§ 5. From the regulation established in § 4, under Nos. 1 and 3, those children shall be exempt who, by legally proved physical defects, shall be wholly deprived of the possibility of self-support, either for a certain time or forever.

§ 6. The legal establishment shall be intrusted to the certificate, conformable to duty, of an official physician, signed also by the police magistracy of the residence, with strict responsibility as to the truth of the testimony, and with the provision of a triple gradation under which there shall be shown either—

- (a) Such limited inability to earn a living as indicates the indispensable need of additional support; or
- (b) Total, temporary, or permanent inability to earn a living; or
- (c) The still worse condition of invalidism, of total blindness, of uninterrupted confinement to the bed, or of other crippled condition which, in addition to total inability to earn a living, renders necessary the assistance of others.

§ 7. The certificates of the physicians and of the magistracy shall definitely distinguish the case of a decided total incurableness or lifelong inability to earn a living from that of a curable defect or of a temporary inability to earn a living, and in the latter case shall propose a definite number of years for which the contribution for support shall be allowed, continued, or increased, after the lapse of which time, eventually, a repeated investigation for further decision shall be submitted.

§ 8. The contribution for support shall continue for the children, even if the still living mother shall change her condition.

§ 9. The pensions shall be paid in quarterly installments in advance. In the event of the death of a beneficiary the support shall become extinct with the end of the mortuary quarter.

^aThese regulations received sovereign confirmation under date of July 6, 1875.

§ 10. The administration of the pension fund and decision as to the use of its income under the preceding paragraphs shall be intrusted to a committee of the whole council under the chairmanship of the respective rector. This committee shall consist, in addition to the rector, of one member each of the theological, juridical, and medical faculties, and two members of the philosophical faculty, who shall be elected by the assembled council, by simple majority of votes, for five years. Annually, with the exception of the accountant, to be mentioned directly, one of the remaining four members shall retire according to a sequence to be decided by lot, but shall be again eligible.

§ 11. The valid passage of resolutions on the part of the committee shall require two-thirds of the votes. The accountant, however, shall be elected by simple majority of votes by the committee from its members. He shall administer his office, like the other members, without payment of an honorarium. The accountant shall close his account annually on June 30, and submit it within four weeks from this time to the rector, who subsequently shall submit it to the other members of the committee and then to the remaining council members for eventual correction; he also shall communicate it to the other persons entitled to participation in the advantages of the institute, and subsequently shall advise the accountant in the name of the rector and the council of his discharge from responsibility.

The obligations concerning the invested capital funds shall be deposited in the archives.

§ 12. The grand-ducal ministry, department for educational affairs, shall have the supervision of the institute, and, therefore, report shall be made to it annually before Michaelmas Day concerning the administration of the fund and the use made of its income, with inclosure of a copy of the account, attested by the secretary of the university.

§ 13. From the said grand-ducal ministry, too, the confirmation of these regulations and the conferring of the rights of a charitable institution shall be requested by the rector and the concilium.

§ 14. Amendments of these regulations are not prohibited. They can, however, be adopted only in an assembly of the persons named in § 1, in whose convocation by the rector the object of the deliberations shall be stated, and in which (assembly) at least two-thirds of the interested parties shall be present, by unanimous consent of the persons present, and shall take effect only upon approval by the supervising ministry.



CHAPTER IV.

DIGEST OF SCHOOL LAWS.

[The following digest was prepared, for the most part, under the direction of the various State superintendents. In a few instances the work was done in the Bureau. Florida, Hawaii, Idaho, New Mexico, Utah, and Wyoming are not represented in the present revision, as it was found impossible to obtain a digest of their laws in time for publication herewith.]

ALABAMA.

(1901.)

1. ORGANIZATION OF THE SYSTEM.

State superintendent—County superintendents—School districts—Township trustees.

State superintendent.—The superintendent of education is elected for two years at a salary of \$2,250 a year. Vacancies filled by appointment of the governor. He must furnish \$15,000 bond; must have an office at the capitol, the books, papers, and records of which are open to persons interested; has four clerical assistants; shall devote his time to the care and improvement of the common schools and the promotion of public education, and exercise a general supervision over all educational interests of the State; has power to require from county superintendents, township trustees, and other school officers such reports as he may deem important, and may remove them from office for failure to make such report or to discharge any other official duty. Other duties are: To visit every county in the State annually, if practicable; to inspect schools and diffuse information as to best methods; make provision for instruction of all pupils in the constitutions of the United States and Alabama, and in hygiene and physiology, with special reference to the effects of alcoholic drinks and narcotics; apportion annually the public school fund to townships and school districts according to the number of children of school age, and see to the proper disbursement of same; print and distribute forms and blanks, his annual report to the governor, laws, and rules and regulations pertaining to the State school system, including therein the constitutions of the United States and Alabama; prescribe a uniform system of keeping accounts and records, and furnish county superintendents and other school officers necessary books for same; keep an account of sixteenth-section and other school funds, with each township or district; require and supervise the collection of poll taxes; elicit and disseminate useful information regarding the school systems of other States and countries; hold or arrange for one or more teachers' institutes in each Congressional district for a week or more during each summer, for which he may expend not exceeding \$500 in any year in employing instructors. On or before October 10, biennially, he shall submit a report to the governor embracing the following: A brief history of his labors; abstract of reports from county superintendents showing condition of the schools; estimates and accounts of expenditures of school money; itemized statements showing disbursement of contingent and all other special funds or appropriations under his control; other matters that he may deem expedient, with such recommendations as he may desire to make for the improvement of the schools. Should the trustees of any township fail to make their semi-annual enumeration of children from 7 to 21 years (see Township trustees), or should the State superintendent have reason to believe such enumeration is

fraudulent or greatly erroneous, he may have a new enumeration made at the expense of such township.

County superintendents.—A county superintendent for each county is elected at each general election for a term of two years, beginning October 1 next after his election. Gives bond in amount fixed by State superintendent—not less than double the probable amount of money to be in his hands at any one time. Receives as compensation 4 per cent of all educational funds legally disbursed by him and approved by the State superintendent. Vacancies are filled by appointment of State superintendent, who may remove any county superintendent for cause, whether appointed or elected. He is president of the county board of education and of the teachers' institute (which see). Other duties are: To have an office at the county seat, where he must be present on the first Saturday of each month during the scholastic year to transact business with school officers and teachers; receive and faithfully keep all funds accruing by taxation or gift for use of public schools in his county; notify township trustees of the amount of the educational fund apportioned to their respective townships or districts as soon as he receives such apportionment; examine the condition of all county school funds, including sixteenth-section fund and sixteenth-section lands unsold in his county, bringing suits when necessary for recovery of such lands or against trespassers thereon; pay teachers' salaries (upon certificate of trustees) quarterly or monthly in counties and districts so provided by special act; appoint 3 trustees for each township or school district and remove them from office when the interest of public education so demands; report by September 30 each year to State superintendent (per blanks furnished) a detailed statement of his official acts and accounts, under penalty of forfeiting his commissions for willfully failing to submit such report within ten days. His books, accounts, and vouchers are subject to examination at any time by the State superintendent or his agent.

School districts.—(See Schools.)

Township trustees.—Three trustees for each township or school district, who shall be freeholders and householders resident therein, shall be appointed by the county superintendent, to serve two years beginning October 1 each odd year. They have immediate supervision of the public schools in their township or district and are exempt from poll tax, jury and road duty. Their duties are: To visit each school at least once a year; to employ teachers, whom they may remove for cause; to inspect school registers kept by teachers; in July of each odd year the district trustees shall make an enumeration of children in their district, each sex, white and black, from 7 to 21 years, and report same to county superintendent by August 1 following; annually, on the last Monday in October, or within seven days thereafter, to call a meeting of parents and guardians of such aged children, advising with whom they shall determine: The number of schools to be established in their township for the current year; location of each school, time of opening and length of session, which shall not be less than five months (except in rare cases four months by approval of county and State superintendents); amount of money apportioned to each school; children to be transferred to other districts, and amount to be set apart for payment of their tuition, with such other business as may be necessary. Within ten days after such meeting they shall report to the county superintendent the number and location of schools, amount of money apportioned to each, and the names of teachers employed.

2. TEACHERS.

Duties—Certificates—Contracts—Institutes.

Duties.—Every teacher must keep a register of pupils' daily attendance, and submit same to trustees for inspection; forward quarterly to county superintendent detailed report of all matters pertaining to the school, sworn to before and approved by trustees, prior to which report teacher can not draw pay; give instruction, in every grade and as regularly as any other subject, in the nature and effects of alcoholic drinks and narcotics.

Certificates.—Every one must obtain a certificate prior to employment as a teacher. State board of examiners, composed of State superintendent (as president) and two teachers of extensive experience and recognized ability appointed by him, have supervision of all examinations of candidates for teachers' certificates in the State. Said board shall meet in November and May each year and prepare questions, lists of which shall be printed by State superintendent and

sent (by the 15th of December and June) to the several county superintendents, who shall not unseal the same except in the presence of the applicants at the hour and day of examination—namely, 10 a. m. on first Mondays in January and July, and for three consecutive days, if necessary. State board may hold special examinations at the department of education, Montgomery, for persons prevented by unavoidable cause from taking the regular examinations; and normal school students may be examined at times and places designated by the board. No candidate shall be examined who is not known to be of good moral character, and anyone who habitually uses profane language or intoxicants shall be deemed of immoral character. Applicants for third-grade certificates shall be examined in orthography, reading, penmanship, grammar, practical arithmetic through fractions, primary geography, and the elementary principles of physiology and hygiene; second grade, practical arithmetic complete, history of Alabama and United States, English grammar and composition, and intermediate geography, additional; first grade, algebra, natural philosophy, geometry, school laws of Alabama, and theory and practice of teaching, still additional. No certificate shall be issued to any candidate who falls below 50 per cent in any branch, and whose general average is less than 75. The State board examine and grade the papers and issue certificates, which are valid for periods as follows: Third grade, two years; second grade, four; first grade, six. No teacher shall be granted a third or second grade certificate more than twice. Anyone having taught ten years under first-grade certificates and showing a high degree of proficiency and professional attainment may be granted a life certificate, which, however, shall be forfeited if the business of teaching is left off for five consecutive years. Fees for regular and normal school examinations are: For third-grade certificates, \$1; second grade, \$1.50; first grade, \$2; life, \$3; special examinations, any grade, \$5. The two State examiners appointed receive \$5 per day while employed; county examiners, \$10 per examination conducted by them. The State superintendent shall revoke the certificate of any teacher found guilty of immoral, indecent, or unbecoming conduct. A register of licensed teachers is kept in his office.

Contracts.—Are made with trustees, in writing, in duplicate; must specify monthly salary; one copy must be filed with county superintendent for his approval within ten days, without which it shall not be valid. Trustees shall not contract for a school of more than 50 pupils to one teacher, nor less than 10 if there are more than that number of each race in the district.

Institutes.—The county superintendent shall appoint two teachers in either public or private schools of the county who, with himself as president, shall constitute the county board of education. They shall meet at least quarterly, and shall organize and maintain teachers' institutes, one for white and one for colored teachers, if there be not less than 10 licensed teachers of that race in the county. Every licensed teacher in the county shall be a member of the institute organized for his race, but no fee shall be imposed on a member without his consent. Institutes shall hold not less than three annual meetings, and every licensed teacher shall attend at least one of them. One such meeting shall be in September, at which an address to the teachers shall be made by a person selected by the board. Institutes shall be devoted mainly to instruction and discussion in regard to methods of teaching and discipline, text-books, and other school matters.

3. SCHOOLS.

School districts—Attendance—Studies—Location of buildings—Scholastic periods.

School districts.—Every township, or fraction thereof, divided by a State or county line or any river, creek, mountain, or other barrier rendering intercourse between the different portions of the township difficult, and every incorporated town or city having 3,000 inhabitants or more shall constitute a separate school district, whose corporate representatives are the township trustees (which see, under Organization). In every district one or more schools for each race separately shall be established, unless the number of children within a reasonable distance be insufficient; in which latter event the trustees shall arrange for the tuition of such children in such manner as they deem proper, paying for same out of the school funds apportioned to such district, and if a transfer to another district can not be conveniently effected the parents or guardians of children that shall have attended some school in the State during a time equal to the

scholastic period of the current year shall be paid by the county superintendent amounts equal to the pro rata of such children in said apportionment of funds.

Attendance.—Every minor above 7 years shall be entitled to attend and receive instruction in some public school of his race in the State. Children that have attended the number of days they are entitled to at one school shall not attend another during the same scholastic year unless by consent of the trustees of the latter. Parents or guardians residing in the State, but non-resident in a district wherein they pay school tax on \$500 worth of real estate, shall be entitled to school privileges for their children in such district. Teachers must keep a register of pupils' daily attendance. Fifty pupils is the maximum number allowed one teacher.

Studies.—(See Teachers; Certificates; Duties.)

Location of buildings.—When but one school is established in a township it shall be so located as to accommodate the largest number of pupils and to encourage the building of a permanent schoolhouse as near the center of the township as possible; such location may be changed by trustees from year to year in order to provide for those who were not in reach of the school in previous years. In locating schools trustees must have regard to population, surroundings, any schoolhouse already built or site procured, and all other circumstances necessary to be considered, so as to promote the interests of free public education. (See also Finances; Taxation.)

Scholastic periods.—Scholastic year begins October 1, ends September 30. Twenty days constitute a school month; not less than six hours a school day. County superintendents shall not approve a teacher's contract (which see) for a less period than five months, except for an unexpired term, unless it be found absolutely impracticable to make the term five months, in which case State superintendent must also approve.

4. FINANCES.

Educational fund—Taxation.

Educational fund.—On October 1 each year the State auditor shall place to the credit of the educational fund the following: Six per cent interest on all sums received from sales of lands granted by the United States for school purposes; 4 per cent interest on the surplus revenue of the United States deposited with the State under act of Congress approved June 23, 1836; rents or other income from unsold lands received from the United States or other source for the benefit of public schools; all sums that may accrue to the State as escheats, and a further annual appropriation of \$550,000. State superintendent shall set apart an amount sufficient to pay expenses of the department of education lawfully paid from such fund, amounts appropriated for normal schools, and then apportion the balance of such fund among the several townships and school districts according to scholastic population, advising each county superintendent of the several amounts apportioned to schools under his supervision.

Taxation.—All poll tax collected in any county shall be retained therein for the support of its schools. Also other licenses, required by law to be paid into the county school fund, shall be paid by county officials direct to the county superintendent and disbursed by him. Each township or district shall receive for the benefit of its schools all the poll tax collected therein. The amount paid by white persons shall be applied exclusively to the maintenance of schools for white children and that paid by colored for colored. All other local school funds raised by taxation or otherwise shall be expended in the districts in and for which they were raised. None of the apportionment from the State shall be used for schoolhouses, furniture, or other contingent expenses.

ARKANSAS.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State commissioners of the school fund—County examiners—District board.

State superintendent.—Every two years there shall be elected a State superintendent of public instruction, who shall have the general superintendence of the business of the free common schools of the State. He shall have an office

at the seat of government, where he shall keep the matter that accumulates by virtue of his office and where he shall be in attendance when not necessarily absent on business. He shall furnish suitable questions for the examination of teachers; prepare and transmit to county examiners the necessary forms and registers; prepare and have printed a course of study for the rural schools of the State, giving the branches to be taught in each grade and directions to teachers on the proper methods of teaching each subject, and supervise the school funds so far as to insure their safety. He shall make an annual report to the governor, showing the number of persons between the ages of 6 and 21 years residing in the State on the 1st day of the preceding July; number of such persons in each county; number of each sex; number white and colored; the whole number of such persons that attended the free common schools of the State during the year ending the 30th day of the last preceding June, and the number in each county that attended during the same period; number of whites of each sex that attended and number of colored of each sex that attended the said schools; the number of common schools in the State; number of pupils that studied each of the branches taught; average wages paid teachers of each sex; the relative average wages paid to male and female teachers, respectively, according to the different grades of the certificates; number of schoolhouses erected during the year, the material and cost thereof; the number previously erected, the material of which they were constructed, their condition and value; the number with their grounds inclosed; the counties in which teachers' institutes were held, and the number that attended the institutes in each county.

He shall likewise report the amount of permanent school fund belonging to the State at the close of the fiscal school year and the amount of other property apportioned to school purposes; the nature, kind, and amount of the investments made of the same; the safety and permanency of such investments; the amount of revenue accruing from the school funds; the income received from the per capita assessment of each county and the amount derived from such assessments in all the counties of the State; the income derived from all other sources, together with the amount derived from each; likewise, in what sums, for what purposes, and in what manner the said school revenue shall have been expended and what moneys of various kinds are in the various county treasuries unexpended.

He shall also append to his report a statistical table, compiled from the materials transmitted to his office by school officers, with proper summaries, averages, and totals given, and shall present such comparison of results and such an exhibit of his administration and of the operation of the common free school system, together with such statements of the true condition of the schools of the State as shall distinctly show the improvements and progress made from year to year in the department of public instruction. He may print 5,000 copies of his report.

He shall apportion the common school fund on September 1, and shall from time to time issue editions of the school law, shall have access to the auditor's books and papers, and may grant State and professional certificates. A vacancy in the office shall be filled by the governor.

State commissioners of the school fund.—(See Finances; Funds.)

County examiner.—The county court of each county shall at the first term thereof after each general election appoint, in each county not divided into two judicial districts, one county examiner; and in each county divided into two judicial districts may appoint one county examiner for each district, such examiner to be of high moral character and scholastic attainments; and all county examiners shall be required before entering upon the duties of their offices to stand the same examination as is required of the teachers who receive first-grade licenses, and no one shall fill the offices of county examiner and school director at the same time. All county examiners shall be paid such salary each year as may be fixed by the county judge.

It shall be the duty of the examiner to examine and license teachers of common schools. The county examiner shall hold at the county seat a public examination on the third Thursday and Friday of March, June, September, and December, using the questions prepared by the department of public instruction. The questions shall be mailed under seal and shall not be opened until the day of examination, and then in the presence of the applicants for license. He shall encourage the inhabitants to organize school districts, to establish public schools; direct the attention of teachers and patrons to those methods of instruction that will best promote mental and moral culture, and to the most feasible and improved plan for building and ventilating schoolhouses; labor to create

among the people an interest in the public schools. He shall receive the reports of the district directors, and shall annually on or before August 10, prepare in tabular form an abstract of the reports made to him by the directors of the school districts embraced within his county, showing the number of organized districts in his county on the 1st day of July preceding; districts that have made their annual reports; number of persons in each district between the ages of 6 and 21 years, distinguishing the sex and color of said persons; number of said persons that attended school during the year, the average number of males and females in daily attendance, and the number that pursued each of the studies designated to be taught in the common schools; number of teachers of each sex employed in his county, average wages paid per month to teachers of each sex, according to the grade of their certificates, whole amount paid as teachers' wages in his county, number of pupils that studied in his county, and the several branches taught; number of schoolhouses erected during the year in his county, material and cost of same, number before erected, material used in their construction, their condition, and value; number of grounds inclosed; amount of money raised by tax in each district, and for what purpose raised; amounts expended and for what purposes; amount of revenue received by his county from the common school fund and received for the support of schools from each of all other sources; for what purposes and in what sums the said revenues were expended, and what amounts unexpended were at the close of the school year in the county treasury; and shall report also the number of deaf mutes, blind, and insane in each school district in his county under 30 years of age, their names and their post-offices. Failing to make this report he shall forfeit \$25. His expenses for actual and unavoidable expenses of his office to the sum of \$25 may be allowed by the county court.

District board.—The county court shall have power to dissolve any school district when petitioned by a majority of the electors concerned to do so. No school district shall be formed having less than 25 persons of the scholastic age.

The electors of every school district shall, when lawfully assembled in annual district school meeting, with not less than five electors present, have the power, by a majority of the votes cast at such meeting, to choose a chairman; adjourn from time to time; appoint when necessary, in the absence of the directors of the district, a clerk pro tempore; elect a director for the district for the next three school years who can read and write; designate a site for a schoolhouse; determine the length of time during which a school shall be taught more than three months in the year; determine what amount of money shall be raised by tax, not to exceed one-half of 1 per cent on the taxable property of the district, sufficient, with the public school revenues apportioned to the district, to defray the expenses of a school for three months, or for any greater length of time they may decide to have a school taught during the year. They may, if sufficient revenue can not be raised to sustain a school for three months in any one year, determine by ballot that no school shall be taught during such year, in which case the revenue belonging to such district shall remain in the treasury to the credit of such school district.

There shall be annually elected by the voters in each school district a director, who shall hold his office for the term of three years and until his successor shall have been elected and qualified. Any person who shall have been elected or appointed a director and shall neglect or refuse to qualify and serve as such shall forfeit to his district the sum of \$10, which may be recovered by action against him at the instance of any elector in the district, and which, when collected, shall be paid into the county treasury by the officer before whom the action was maintained and added by the treasurer to the school-fund revenues appropriated by the district. Any director who shall neglect or fail to perform any duties of his office shall forfeit to his district the sum of \$25.

The directors shall have charge of the school affairs of their districts and shall have the care and custody of the schoolhouses and grounds, books, records, papers, and other property belonging to the district, shall carefully preserve the same, preventing waste and damage, and shall purchase or lease, in the corporate name of the district, such schoolhouse site as may be designated by a majority of the legal votes at the district meeting; shall hire, purchase, or build a schoolhouse with funds provided by the district for that purpose, and may sell or exchange such site of schoolhouse when so directed by a majority of the electors of any legal meeting of the district.

They shall hire teachers, but shall not employ any teacher who is related to any of them within the fourth degree of consanguinity or affinity, unless peti-

tioned to do so by three-fourths of the patrons of the district; shall adopt text-books, visit the schools at least once each term, and when not of a special district may expend annually as much as \$25 for maps, charts, globes, dictionaries, and other apparatus, subject to the approval of the State superintendent.

They shall procure from the county examiner and furnish the teacher at the commencement of the term a register for his school, and require the said teacher to report in the said register at the close of the school term the number of days of the said term, name and age of each pupil, date on which each entered the school, separate days on which each attended, whole number of days each attended, studies each pursued, total number of days all pupils attended, average daily attendance, and the number of visits received from the directors during the term.

They shall submit to the district at the annual meeting an estimate of the expenses of the district for that year, including the expenses of a school for the term of three months for the next year, after deducting the probable amount of school moneys to be apportioned to the district for that school year, and shall also submit an estimate of the expenses per month of continuing the school beyond the term of three months, and of whatever else may be necessary for the comfort and advancement of the said school.

Cities and towns may organize as separate school districts with a board of six directors.

2. TEACHERS.

Certificates—Duties—Institutes.

Certificates.—Any person who shall teach without a certificate of qualification shall not be entitled to compensation for such service from common school funds, unless his license expires during the term named in the written contract with the board of directors.

The State superintendent shall furnish the county examiner suitable questions for the examination of teachers. He may grant State life certificates to any person in the State who may pass a thorough examination in all those branches required for county certificates, and also algebra, geometry, physics, rhetoric, mental philosophy, history, Latin, the Constitution of the United States and of Arkansas, natural history, and the theory and art of teaching. He may grant a professional certificate, valid in any county for six years, to any person who shall pass an examination in the branches required for a first-grade certificate and in plane geometry, general history, algebra, and rhetoric.

It shall be the duty of the county examiner to examine and license teachers; but no person shall be licensed who is given to profanity, drunkenness, gambling, licentiousness, or other demoralizing vices, or who does not believe in the existence of a Supreme Being. The examiner shall not be required to give private examinations. To those passing a satisfactory examination in grammar, arithmetic, United States history, reading, writing, spelling, and geography, he may grant a third-grade certificate, valid in the county for six months; for a second-grade certificate are required the additional branches of Arkansas history, physiology and hygiene, and theory and practice of teaching; for a first grade elementary algebra and civil government still additional. In addition, every applicant shall be examined as to his knowledge and proficiency in the method of designating and reading the survey of lands by ranges, townships, and sections, as platted and designated by the United States Government.

The county examiner may cite to reexamination any person holding a license and under contract to teach any free school in his county; and on being satisfied by reexamination or other means that such person does not sustain a good moral character or has not sufficient learning or ability to render him a competent teacher, he may revoke the license of such person; and in case of such revocation he shall immediately give notice to the teacher and directors involved and thereby terminate the contract between said parties, but the wages of such teacher shall be paid for the time he actually taught prior to such notice. (See also *Organization—County examiner.*)

Other duties.—Every teacher shall keep a daily register of his school in the manner prescribed by law and indicated by the blank school register to be furnished by the directors at the beginning of his school. No teacher shall be entitled to the last month's pay for any school taught by him until he shall have returned to the directors of the district the daily register, with all statistical work required by law perfected and complete. Every teacher shall follow as

closely as practicable the course of study issued by the department of public instruction.

Institutes.—It shall be the duty of all teachers of the public schools to attend one institute annually, which shall be held by the county examiner after having given twenty days' notice of the time and place, and no teacher shall be charged for loss of time while necessarily absent from his school to attend such institute or to attend a quarterly examination.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—The district board shall make provision for establishing separate schools for white and colored children of school age, and shall adopt such other measures as they may judge expedient for carrying the free school system into uniform operation throughout the State, and providing as nearly as possible for the education of every youth 6 to 21 years of age for at least three months in the year. In special districts schools shall be kept open at least three, but not more than ten, months.

Character of instruction.—The board of directors in special districts may establish primary, graded, or high schools and employ a superintendent. [Reference is made to the studies in which teachers are required to be examined or the text-books used as indicating the branches taught in the public schools.]

Text-books.—The State superintendent shall prepare, for the benefit of the common schools of the State, a list of text-books on orthography, reading in English, mental and written arithmetic, penmanship, English grammar, modern geography, and history of the United States as are best adapted to the wants of the learner, and as have been prepared with reference to the most philosophical methods of teaching those branches, and shall recommend the said text-books to teachers and to directors throughout the State. At the annual school election on the third Saturday in May the voters of each school district may vote on the question of uniformity of text-books. If a majority of the votes cast be in favor of uniformity, the county judge shall appoint two citizens interested in public schools and the State superintendent shall appoint two teachers holding first-grade certificates who, with the county examiner as chairman, shall constitute the county schoolbook board and shall select a series of text-books to be used exclusively in the county for six years. Any teacher using any other book instead of those adopted by said board shall be subject to a fine of not less than \$15. Fine for selling book at higher than contract price not less than \$10.

Buildings.—The directors have the care and custody of the district school property, and shall acquire or sell property when directed by a majority of the electors in other than special districts.

Any person who shall willfully destroy or injure any building used as a school-house or for other educational purposes, or any furniture, fixtures, or apparatus thereto belonging, or who shall deface, mar, or disfigure any such building, furniture, or fixtures, by writing, cutting, painting, or posting thereon any likeness, figure, words, or device without the consent of the teacher or other person having control of such house, furniture, or fixtures shall be fined in a sum double the value of any such building, furniture, fixtures, or apparatus so destroyed, and shall be fined in a sum not less than \$10 nor more than \$50 for each offense for writing, painting, cutting, or pasting in any such building, furniture, or fixtures any such words, figures, likeness, or device, to be recovered by civil action in any court of competent jurisdiction, and this punishment is not in lieu of that provided by the statutes for such offenses.

4. FINANCE.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The proceeds of all lands that have been or hereafter may be granted by the United States to this State and not otherwise appropriated by the United States or this State; also moneys, stocks, bonds, lands, and other property now belonging to any fund for purposes of education; also the net proceeds of all sales of lands and other property and effects that may accrue to this State by escheat, or from sales of estrays, or from unclaimed dividends or distributive shares of estates of deceased persons; also any proceeds of the sale of public lands which may have been or may be hereafter paid

over to the State (Congress consenting); also 10 per cent of the net proceeds of the sales of all State lands; also all grants, gifts, or devises that may have been or hereafter may be made to this State, and not otherwise appropriated by the tenure of the grant, gift, or devise, shall be securely invested and sacredly preserved as a public fund that shall be designated as the "common school fund" of the State, and which shall be the common property of the State, except the proceeds arising from the sale or lease of the sixteenth section, the principal of which shall never be apportioned or used.

The annual income from said fund, together with \$1 per capita annually assessed on every male inhabitant over the age of 21 years, and so much of the ordinary annual revenue of the State as may hereafter be set apart by law for such purpose, shall be faithfully appropriated for maintaining a system of free common schools for this State, and shall be appropriated to no other purpose whatsoever. The State auditor shall, on requisition from the State superintendent of public instruction, draw warrants on the State treasurer for payment to the several county treasurers of the school revenues due their respective counties.

The management of the common school fund shall be vested in a board of commissioners of the school fund, composed of the secretary of state, the auditor, and State superintendent of public instruction.

Taxation.—The general assembly shall provide by general laws for the support of common schools by taxes, which shall never exceed in any one year 2 mills on the dollar on taxable property, and a per capita tax of \$1 on every male inhabitant of the State over 21; provided, it may authorize school districts to levy a tax not to exceed 5 mills on the dollar in any one year for school expenses. (See also Organization; District board.)

CALIFORNIA.

ORGANIZATION OF THE SYSTEM.

State board of education—*State superintendent of public instruction*—*County board of trustees of the "School Teachers' Annuity and Retirement Fund"*—*County board of education*—*County superintendent of schools*—*District board of school trustees*—*City board of education*.

State board of education.—The State board of education shall be the governor, the president of the University of California, the professor of pedagogy in that institution, the State superintendent, and the principals of the State normal schools, the governor being president and the superintendent secretary of the board. The duties of the board are to adopt regulations for the government of the public schools and the district school libraries; to prescribe by general rule the credentials upon which persons may be granted certificates to teach in the high schools of this State. No credentials shall be prescribed or allowed unless the same, in the judgment of said board, are the equivalent of a diploma of graduation from the University of California, and are satisfactory evidence that the holder thereof has taken an amount of pedagogy equivalent to the minimum amount of pedagogy prescribed by the State board of education of this State and include a recommendation for a high school certificate from the faculty of the institution in which the pedagogical work shall have been taken. The said board shall also consider the cases of individual applicants who have taught successfully for a period of not less than twenty school months, and who are not possessed of the credentials prescribed by the board under the provisions of this section. The said board, in its discretion, may issue to such applicants special credentials upon which they may be granted certificates to teach in the high schools of the State. In such special cases the board may take cognizance of any adequate evidence of preparation which the applicants may present. The standard of qualification in such special cases shall not be lower than that represented by the other credentials named by the board under the provisions of this section. To grant diplomas entitling the holder to teach; to have done by the State printer or other officer having the management of the State printing any printing required by it, provided that all orders for printing shall first be approved by the State board of examiners; and to designate some educational monthly journal as the official organ of the department of public instruction. One

copy of the journal so designated shall be furnished by the county superintendent to the clerk of each board of district trustees, to be placed by him in the district library, and the county superintendent of schools shall draw his warrant semi-annually in favor of the publishers of such school journal for a sum not exceeding \$1.50 a district for each school year and charge the same to the library fund of the district. The actual traveling expenses of the members incurred in attending the meetings of the board shall be paid out of the general fund in the State treasury.

State superintendent of public instruction.—Every four years there shall be elected a State superintendent of public instruction, whose duty shall be: First. To superintend the schools of this State. Second. To report to the governor, on or before the 15th day of September preceding each regular session of the legislature, a statement of the condition of the State normal schools and other educational institutions supported by the State, and of the public schools. Third. To accompany his report with tabular statements, showing the number of school children in the State; the number attending public schools, and the average attendance; the number attending private schools, and the number not attending schools; the amount of State school fund apportioned, and the sources from which derived; the amount raised by county and district taxes, or from other sources of revenue, for school purposes; and the amount expended for salaries of teachers, for building schoolhouses, for district school libraries, and for incidental expenses. Fourth. To apportion the State school fund, and to furnish an abstract of such apportionment to the State comptroller, the State board of examiners, and to the county auditors, county treasurers, and county superintendents of the several counties of the State. Fifth. To draw his order on the comptroller in favor of each county treasurer for school moneys apportioned to the county. Sixth. To prepare, have printed, and furnish all officers charged with the administration of the laws relating to the public schools, and to teachers, such blank forms and books as may be necessary to the discharge of their duties, including blank teachers' certificates to be used by county boards of education. Seventh. To have the laws relating to the public schools printed in pamphlet form, and to supply school officers and school libraries with one copy each. Eighth. To visit the several orphan asylums to which State appropriations are made, and examine into the course of instruction therein. Ninth. To visit the schools in the different counties, and inquire into their condition; and the actual traveling expenses thus incurred (provided that they do not exceed \$1,500 per annum) shall be allowed, audited, and paid out of the general fund in the same manner as other claims are audited and paid. Tenth. To authenticate with his official seal all drafts or orders drawn by him, and all papers and writings issued from his office. Eleventh. To have bound, at the State bindery, all valuable school reports, journals, and documents in his office, or hereafter received by him. Twelfth. To report to the comptroller, on or before the 10th day of July of each year, the total number of children in the State between the ages of 5 and 17 years, as shown by the latest reports of the county superintendents on file in his office. Thirteenth. To deliver over, at the expiration of his term of office, on demand to his successor, all property, books, documents, maps, records, reports, and other papers belonging to his office, or which may have been received by him for the use of his office.

He shall have power to call, biennially, a convention of the county and city superintendents, to assemble at such time and place as he shall deem most convenient, for the discussion of questions pertaining to the supervision and administration of the public schools, the expenses of the superintendents being met by the State.

County boards of education.—Except in any city and county, there shall be a county board of education, which shall consist of the county superintendent of schools and of four other members, appointed by the board of supervisors of the county; a majority of the members appointed shall be experienced teachers, holding not lower than grammar school certificates in full force and effect: *Provided*, That in all counties in which there are one or more high schools at least one of the appointive members of the board for such county or counties shall hold a certificate of the high school grade. Each county board shall meet annually at such time as they may determine. Special meetings may be called by the superintendent whenever the exigencies of the schools may require them to be held.

Examination of applicants for teachers' certificates shall be held only at the annual meeting of the board, but certificates upon credentials may be granted and certificates renewed at any meeting of the board.

The board of supervisors shall allow to each member of the county board of education a compensation of \$5 per day for his services, and the same rate of mileage as is allowed to the members of the board of supervisors of the county. The secretary shall be allowed the sum of \$5 per day for the actual time that the board may be in session; said compensation of the members of the board, and of the superintendent, shall be payable out of the same fund and in the same manner as the salary of the county superintendent.

The board shall have power to examine teachers, and grant certificates, to prescribe and enforce the use of a uniform series of text-books and a course of study in the public schools, and adopt a list of books and apparatus for district school libraries, to issue diplomas of graduation from any of the public schools of the county, except in incorporated cities having boards of education.

County superintendents of schools.—Every four years there shall be elected a county superintendent of schools, whose duty shall be to superintend the schools of his county; to apportion the school moneys to each school district at least four times a year; to draw upon the county auditor for the sums due district or city schools; to keep, open to the inspection of the public, a register of requisitions, showing the fund upon which the requisitions have been drawn, the number thereof, in whose favor, and for what purpose they were drawn, and also a receipt from the person to whom the requisition was delivered; to visit and examine each school in his county at least once in each year, and for every school not so visited the board of supervisors must, on proof thereof, deduct \$10 from his salary; to preside over teachers' institutes held in his county, and to secure the attendance thereof of lecturers competent to instruct in the art of teaching, and to report to the county board of education the names of all teachers in the county who fail to attend regularly the sessions of the institute; to enforce the course of study, the use of text-books, and the rules and regulations for the examination of teachers prescribed by the proper authority. He shall have power to issue, if he deem it proper to do so, temporary certificates, valid until the next semiannual meeting of the county board of education, to persons holding certificates of like grade granted in other counties, cities, or cities and counties, or upon any certificates or diplomas upon which county boards are empowered to grant certificates without examination, but no person shall receive such certificate more than once in the same county. He shall distribute all laws, reports, circulars, instructions, and blanks which he receives for the use of school officers; keep in his office the reports of the superintendent of public instruction; keep a record of his official acts, and of all the proceedings of the county board of education, including a record of the standing, in each study, of all applicants examined, which shall be open to the inspection of any applicant or his authorized agent; pass upon and approve or reject all plans for schoolhouses, except in incorporated cities having boards of education (and to enable him to do so, all boards of trustees, before adopting any plans for school buildings, must submit the same to the county superintendent for his approval); appoint trustees to fill all vacancies, to hold until the 1st day of July succeeding such appointment; when new districts are organized, shall appoint trustees for the same, who shall hold office until the 1st day of July next succeeding their appointment; make reports, when directed by the superintendent of public instruction, showing such matters relating to the public schools in his county as may be required of him, and failure to do so causes him to lose \$100 of his salary; preserve carefully all reports of school officers and teachers, and, at the close of his official term, deliver to his successor all records, books, documents, and papers belonging to the office, taking a receipt for the same, which will be filed in the office of the county clerk. He shall, unless otherwise provided by law, in the month of July of each year, grade each school, and a record thereof shall be made in a book to be kept by the county superintendent in his office for this purpose.

His traveling expenses shall be paid, provided they do not exceed \$10 a district in the year. No superintendent who receives an annual salary of \$1,500 or more may follow the profession of teaching or any vocation that can conflict with his duties as superintendent. The county superintendent may appoint a deputy, but the deputy shall receive no compensation.

District board of school trustees and city board of education.—No new school district shall be formed unless the parents or guardians of at least 15 children of school age, residents in the contemplated district, and residing a greater distance than 2 miles by a traveled road from the public schoolhouse in the district in which said parents or guardians reside, present a petition to the county superintendent. Every city or incorporated town, unless subdivided by

the legislative authority, shall constitute a separate school district, which shall be governed by the board of education or board of school trustees.

An election for school trustees must be held in each school district on the first Friday of June of each year, at the district schoolhouse, if there is one, and if there is none, at a place to be designated by the board of trustees. The number of school trustees for any school district, except where city boards are otherwise constituted by law, shall be three, each to serve three years.

Boards of education are elected in cities under the provisions of the laws governing such cities, and their powers and duties are as prescribed in such laws, except as otherwise provided. The powers and duties of trustees of school districts and of boards of education in cities are as follows:

First. To prescribe and enforce rules, not inconsistent with law or those prescribed by the State board of education for their own government and government of schools, and to transact their business at regular or special meetings called for such purpose, notice of which shall be given each member.

Second. To manage and control the school property within their districts, and to pay all moneys collected by them, from any source whatever, for school purposes into the county treasury, to be placed to the credit of the special fund of their districts.

Third. To purchase text-books of the State series for the use of pupils whose parents are unable to purchase them; school furniture, including organs and pianos, and apparatus and such other things as may be necessary for the use of schools: *Provided*, That, except in incorporated cities having boards of education, they purchase such books and apparatus only as have been adopted by the county board of education.

Fourth. To rent, furnish, repair, and insure the school property of their respective districts.

Fifth. When directed by a vote of their district, to build schoolhouses or to purchase or sell school lots.

Sixth. To make, in the name of the district, conveyances on all property belonging to the district and sold by them.

Seventh. To employ the teachers and, excepting in incorporated cities having boards of education, immediately notify the superintendent of schools, in writing, of such employment, naming the grade of certificate held by the teachers employed; and to employ janitors and other employees of the schools; to fix and order paid their compensation, unless the same be otherwise prescribed by law: *Provided*, That no board of trustees shall enter into any contract with such employees to extend beyond the 30th day of June next ensuing.

Eighth. To suspend and expel pupils for misconduct.

Ninth. To exclude from schools children under 6 years of age: *Provided*, That in cities and towns in which the kindergarten has been adopted, or may hereafter be adopted, as a part of the public primary schools children may be admitted to such kindergarten classes at the age of 4 years.

Tenth. To enforce in schools the course of study and the use of text-books prescribed and adopted by the proper authority.

Eleventh. To appoint district librarians and enforce the rules prescribed for the government of district libraries.

Twelfth. To exclude from schools and school libraries all books, publications, or papers of a sectarian, partisan, or denominational character.

Thirteenth. To furnish books for the children of parents unable to purchase them, the books so furnished to belong to the school district and to be kept in the district school library when not in use.

Fourteenth. To keep a register, open to the inspection of the public, of all children applying for admission and entitled to be admitted into the public schools, and to notify the parents or guardians of such children when vacancies occur, and receive such children into the schools in the order in which they are registered.

Fifteenth. To permit children from other districts to attend the schools of their district only upon the consent of the trustees of the district in which such children reside: *Provided*, That should the trustees of the district in which children whose parents or guardians desire them to attend in other districts reside refuse to grant their consent, the parents or guardians of such children may appeal to the county superintendent, and his decision shall be final.

Sixteenth. On or before the 1st day of April in each year to appoint a school census marshal, and notify the superintendent of schools thereof, but in any city, or city and county, the appointment of all school census marshals shall be subject to the approval of the city superintendent of schools. In case of failure

to so appoint marshals the board are jointly and severally liable for the amount the district loses of the apportionment of school moneys.

Seventeenth. To make an annual report on or before the 1st day of July to the superintendent of schools, in the manner and form and on the blanks prescribed by the superintendent of public instruction.

Eighteenth. To make a report, whenever required, directly to the superintendent of public instruction, of the text-books used in their schools.

Nineteenth. To visit every school in their district at least once in each term, and examine carefully into its management, condition, and wants. This clause to apply to each and every member of the board of trustees.

Twentieth. Boards of trustees may, and upon a petition signed by a majority of the heads of families resident in the district, as shown by the last preceding school census, must, call meetings of the qualified electors of the district for determining or changing the location of the schoolhouse or for consultation in regard to any litigation in which the district may be engaged or be likely to become engaged, or in regard to any affairs of the district. The board must sustain all the schools established by them for an equal length of time and, as far as practicable, with equal rights and privileges.

The board of education of every city or city and county, or board of school trustees of every school district in this State, containing five or more deaf children, or children who from deafness are unable to hear common conversation, between the ages of 3 and 21 years, may in their discretion establish and maintain separate classes in the primary and grammar grades of the public schools, wherein such pupils shall be taught by the purely oral system for teaching the deaf.

The census marshal shall annually take an enumeration of all children, including Indians who pay taxes or who are not living in tribal relation, under 17 years of age.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—Every teacher shall, previous to entering upon duty, file a valid certificate with the county superintendent of schools, and show that he is 18 years of age or more.

The State board of education shall have power to grant life diplomas of four grades, valid throughout the State, as follows: (a) High school: Authorizing the holder to teach in any primary and grammar or high school. (b) Grammar school: Authorizing the holder to teach in any primary or grammar school. (c) Kindergarten-primary: Authorizing the holder to teach in the kindergarten class of any primary school. (d) Special: Authorizing the holder to teach in any school such special branches and in such grades as are named in such diploma.

Life diplomas may be issued only to such persons as have held for one year, and still hold, a valid county, or city and county, certificate corresponding in grade to the grade of diploma applied for, and who shall furnish satisfactory evidence of having had a successful experience in teaching of at least forty-eight months. Not less than twenty-one months of said experience shall have been in the public schools of California. Every application must be accompanied to the State board of education by a certified copy of a resolution adopted by at least a three-fourths vote of all the members composing a county, or city and county, board of education, recommending that the diploma be granted, and also by an affidavit of the applicant, specifically setting forth the places in which and the dates between which said applicant has taught. The application must be accompanied by a fee of \$2, for the purpose of defraying the expense of issuing the diploma.

To revoke or suspend for immoral or unprofessional conduct, or for evident unfitness for teaching, life diplomas, educational diplomas, documents issued under the provisions of sections 1503 and 1775 of this code, or credentials issued in accordance with subdivision 2 of this section, and to adopt such rules for said revocation as they may deem expedient or necessary.

County boards of education may, on examination, grant certificates as follows:

(1) Grammar school certificates: To those who have passed a satisfactory examination in the following studies: Reading, English grammar and advanced composition, English and American literature, orthography and defining, penmanship, drawing, vocal music, bookkeeping, arithmetic, algebra to quadratics, plane geometry, geography (physical, political, and industrial), elementary

physics, physiology and hygiene, history of the United States and civil government, history (ancient, mediæval, and modern), school law, methods of teaching.

(2) Special certificates: To those who, by examination or any credentials, or by both, shall satisfy the board of their special fitness to teach one or more of the particular studies for which special certificates may be granted, and who shall satisfy the board of their proficiency in English grammar, orthography, defining, and methods of teaching. No special certificate shall be granted to teach, in any school, studies other than drawing, music, physical culture, and commercial, technical, or industrial work.

All examinations shall be in writing in answer to questions formulated by the board of education. The said board shall also examine all applicants, orally, touching the questions asked and such other matters in connection therewith as shall have a tendency to demonstrate the fitness of the applicant to assume the duties of teacher. The said board shall ask questions of practical utility, with a view of ascertaining the knowledge and ability of the applicant. All examinations shall be public.

The standing of each applicant in each study, and in the class, must be indorsed on the back of each certificate issued upon examination, otherwise it is not a valid certificate.

County boards of education may, without examination, grant certificates as follows:

High school certificates: (1) To the holders of credentials approved by the State board of education in accordance with subdivision 2 of section 1521 of the Political Code; (2) to the holders of special credentials issued by said State board, in accordance with said subdivision; (3) to holders of high school certificates issued by any county, or city and county, board of education in this State; (4) to holders of normal school diplomas accompanied by documents from the faculty of the State university, provided for in subdivision 5 of section 1503 of this code.

Grammar school certificates: To the holders of the following credentials: (1) Life diplomas or certificates of any State: *Provided*, That the State board of education in this State shall have decided that said diplomas or certificates represent experience and scholarship equivalent to the requirements for the elementary [grammar school] life diploma in California; (2) California State normal school diplomas, San Francisco city normal school diplomas heretofore granted and other normal school diplomas: *Provided*, That the State board of education of this State shall have recommended the normal school issuing said diploma as being of equal rank with the State normal schools of California; (3) diplomas from the University of California, or from any other university that shall be declared by the State board of education to be of equal rank with the University of California when the holders have completed the prescribed course in the pedagogical department of the State university, or a pedagogical course that said State board shall declare to be equivalent to such prescribed course, and have been recommended by the faculty of the university issuing such diploma; (4) grammar school or grammar grade certificates of any county, or city and county, of California.

Kindergarten-primary certificates: (1) To the holders of kindergarten-primary certificates of any county, or city and county, of California; (2) to the holders of diplomas of graduation from the kindergarten department of any State normal school of this State; (3) to the holders of credentials, showing that the applicant has had professional kindergarten training in an institution approved by the State board of education, and also general education equivalent to the requirements for graduation from the kindergarten department of a California State normal school.

When the holder of any certificate or State diploma shall have taught successfully in the same county, or city and county, for five years, the board of education of such county, or city and county, may grant a permanent certificate of the kind and grade of the class in which said applicant has been teaching, valid in the county, or city and county, in which issued, during the life of the holder, or until revoked for any of the causes designated in subdivision 4 [3] of section 1791 of this code: *Provided*, That such permanent certificate shall in no case be of a higher grade than the grade of the certificate or State diploma on which the teaching has been done; and for a permanent high school certificate twenty months of said teaching shall have consisted of regular high school work: *And provided further*, That a certificate when renewed the second time, or any time thereafter, shall become by such renewal a permanent certificate if

the holder of said certificate shall have complied with all of the conditions of this subdivision.

Whenever any holder of a diploma from the State university, or from any other university that shall be declared by the State board of education to be of equal rank with the State University, shall present to said State board satisfactory evidence of having had two years' successful experience as a teacher, subsequent to graduation, accompanied by satisfactory evidence that such holder has completed the prescribed course in the pedagogical department of the University of California, or a pedagogical course equivalent thereto, the State board of education shall grant to the holder of said university diploma a document signed by the president and secretary of the State board, showing such fact, and said diploma, accompanied by said document of the State board attached thereto, shall become a permanent certificate of qualification to teach in any grammar or primary or high school in the State, valid until such time as the said document shall be revoked by said State board of education, for any of the causes shown in subdivision 4 [3] of section 1791 of this code.

In every city of the first, second, or third class, having a city board of education, and in every city and county, there may be a city, or city and county, board of examination, to be composed of the city, or city and county, superintendent of schools and four other members, all of whom shall be experienced teachers, elected by the city, or city and county, board of education and holding office for four years. Such board has power to examine applicants and to prescribe a standard of proficiency which may entitle the person examined to receive: (a) A city, or city and county, grammar school certificate, valid for six years, authorizing the holder to teach any primary or grammar school or class in such city, or city and county: (b) a city, or city and county, special certificate, valid for six years, authorizing the holder to teach such special subjects in any school of the city, or city and county, and in such grades as are designated in such certificate. Applicants for special certificates by examination or any credentials, or by both, shall satisfy the board of their special fitness to teach one or more of the particular studies for which special certificates may be granted, and shall satisfy the board of their proficiency in English grammar, orthography, defining, and methods of teaching. No special certificates shall be granted to teach, in any school, studies other than drawing, music, physical culture, and commercial, technical, or industrial work. The board of examination shall report the result of the examination to the city, or city and county, board of education, and said board of education shall thereupon issue to the successful applicants the certificates to which they shall be entitled; and for immoral or unprofessional conduct, profanity, intemperance, or evident unfitness for teaching, they shall recommend to the city, or city and county, board of education the revocation of any certificates previously granted by said board of education in such city, or city and county.

The city, or city and county, boards of examination may also recommend the granting of city, or city and county, certificates, and the renewal thereof, in the manner provided for the granting and renewal of county certificates by county boards of education in section 1775 of this code.

The holders of city, or city and county, certificates are eligible to teach in the cities, or cities and counties, in which such certificates were granted in schools or classes of grades corresponding to the grades of such certificates, and when elected shall be dismissed only for insubordination or other causes, as mentioned in section 1791 of this code, duly ascertained and approved by the boards of education of such cities or cities and counties.

City superintendents of public schools, elected by city boards of education, shall be elected for a term of four years, and said city boards of education shall have full power to fix the salary of all employees.

The holders of special city, or city and county, certificates are eligible to teach the special branches mentioned in their certificates in the grades of all the schools in the city, or city and county, in which such certificates were granted, corresponding to the grade of said special certificates.

The teacher shall enforce the course of study, the use of the legally authorized text-books, and the rules and regulations prescribed for schools; hold pupils to a strict account for their conduct on the way to or from school, on the playgrounds, or during recess; suspend, for good cause, any pupil from the school, and report such suspension to the board of school trustees or city board of education for review, and if such action is not sustained by them, the teacher may appeal to the county superintendent, whose decision shall be final; keep a State school register, in which shall be left at the close of the term a

report showing programme of recitations, classification, and grading of all pupils who have attended school at any time during the school year, and the superintendent shall in no case draw a requisition in favor of the teacher until the teacher has filed with him a certificate from the clerk of the board of school trustees to the effect that the provisions of this subdivision have been complied with; make an annual report to the county superintendent at the time and in the manner and on the blanks prescribed by the superintendent of public instruction. Any teacher who shall end any school term before the close of the school year shall make a report to the county superintendent immediately after the close of such term; and any teacher who may be teaching any school at the end of the school year shall, in his or her annual report, include all statistics for the entire school year, notwithstanding any previous report for a part of the year, and the superintendent of schools shall in no case draw a requisition for the salary of any teacher for the last month of the school term until the report required by this subdivision has been filed and by him approved; make such other reports as may be required by the superintendent of public instruction, county superintendent, board of school trustees, or city board of education.

Preliminary training.—The State normal schools have for their objects the education of teachers for the public schools of the State. They shall be under the management and control of boards consisting of five members, called trustees, who shall have the following powers and duties: To elect a secretary, who shall receive such salary, not to exceed \$150 per annum, as may be allowed by the board; to prescribe rules for their own government and for the government of the school; to prescribe rules for the reports of officers and teachers of the school, and for visiting other schools and institutes; to provide for the purchase of school apparatus, furniture, stationery, and text-books for the use of the pupils; to establish and maintain training or model schools, and require the pupils of the normal school to teach and instruct classes therein; to elect a principal and other necessary teachers, fix their salaries, and prescribe their duties; to issue diplomas of graduation upon the recommendation of the faculty of the school having the force of grammar grade certificate; to control and expend all moneys appropriated for the support and maintenance of the school, and all money received from tuition or from donations; to cause a record of all their proceedings to be kept, which shall be open to public inspection at the school; to keep, open to public inspection, an account of receipts and expenditures; to annually report to the governor a statement of all their transactions, and of all matters pertaining to the school; to transmit with such report a copy of the principal teacher's annual report. The age of admission is 16 years. Teachers holding valid certificates to teach in any county in the State may be admitted to any State normal school. Every person making application for admission as a pupil in the normal school must file a declaration that he enters the school to fit himself for teaching and that it is his intention to engage in teaching in the public schools of the State, or in the State or Territory wherein he resides.

Joint board normal school trustees.—There shall be a joint board of State normal school trustees, to be composed of the governor, the superintendent of public instruction, the presidents of the different State normal schools, the chairman and two other members of each normal school board. The two members besides the chairman of each local board shall be selected by the respective local boards for every joint meeting. Said joint board shall meet on the second Friday of April in each year, alternately at the different State normal schools. The first meeting after the passage of this act shall be at San Diego, the second meeting at San Francisco, the third at San Jose, the fourth at Chico, and the fifth at Los Angeles. Thereafter the places of meeting shall be in the order mentioned above. Special meetings may be called at any time and at any place by the governor for the transaction of any urgent business affecting the welfare of any or all of the State normal schools when in his judgment it is necessary. The governor shall be ex officio chairman of said joint board of normal school trustees.

The powers and duties of said joint board of normal school trustees are as follows: 1. To prescribe and enforce a uniform series of text-books for use in the State normal schools; the State series of text-books shall be used when published in the grades and classes for which they are adapted. 2. To prescribe and enforce a uniform course of study and time and standard for graduation from the State normal schools. 3. To prescribe a uniform standard of admission for students entering the normal schools and for transfer of pupils from one normal school to another: *Provided*, That a student for good cause may, upon

recommendation of the president of the school from which he seeks to be transferred, enter any other normal school, and without examination be admitted to classes corresponding to those in the school which he has left. 4. To sit as a board of arbitration in matters concerning the management of each State normal school that may need adjustment. 5. The joint board shall also have the power to pass any general regulations that may be applied to all the State normal schools, thus affecting their well-being. 6. Members in attending the meetings of the joint board shall receive mileage while in actual attendance upon the meeting, the same to be paid out of any appropriation made by the legislature for that purpose.

Meetings.—The superintendent of every county in which there are twenty or more school districts, and of every city and county in the State, must hold at least one teachers' institute in each year; and every teacher employed in a public school in the county must attend such institute and participate in its proceedings: *Provided*, That cities employing 70 or more teachers may have a separate institute, to meet at least once a year, the sessions to be of not less than three nor more than five days: *And provided further*, That teachers attending such city institute shall not be required to attend the county institute. The expenses of such city institutes, not exceeding \$200 annually, shall be paid from the special school funds of said city.

In any county in which there are less than 20 school districts the county superintendent may, in his discretion, hold an institute. When directed by the county board of education, he shall hold an institute not oftener than once each year, at such time and place as the board may direct. Each session of the institute must continue not less than three nor more than five days. When the institute is held during the time that teachers are employed in teaching, their pay must not be diminished by reason of their attendance. The county superintendent must keep an accurate account of the actual expenses of said institute, with vouchers for the same, and draw his requisition upon the county auditor, who shall draw his warrant on the unapportioned county school fund to pay said amount: *Provided*, That such amount must not exceed \$200 for any one year.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every school, unless otherwise provided by law, must be open for the admission of all children between 6 and 21 years of age residing in the district, and the board of school trustees, or city board of education, have power to admit adults and children not residing in the district whenever good reasons exist therefor. Whenever there is sufficient money in the fund of any school district to support school for six months the county superintendent shall have school kept if the district fail to. Trustees shall have the power to exclude children of filthy or vicious habits, or children suffering from contagious or infectious diseases, and also to establish separate schools for Indian children and for children of Mongolian or Chinese descent. When such separate schools are established, Indian, Chinese, or Mongolian children must not be admitted into any other school: *Provided*, That in cities and towns in which the kindergarten has been adopted, or may hereafter be adopted, as part of the public primary schools, children may be admitted to such kindergarten classes at the age of 4 years.

Unless excused as hereinafter provided, each parent, guardian, or other person, in the State of California, having control or charge of any child between the ages of 8 and 14 years, shall be required to send such child to a public school, during each school year, for a period of at least five months of the time during which a public school shall be in session, in the city or county or school district in which said child resides, and at least eighteen weeks of such attendance shall be consecutive: *Provided*, That should it be shown to the satisfaction of the board of education of the city or county, or of the board of trustees of the school district, in which such child resides, that the child's bodily or mental condition is such as to prevent or render inadvisable attendance at school, or application to study, a certificate from any reputable physician that the child is not able to attend school, or that its attendance is inadvisable, must be taken as satisfactory evidence by any such board; or proof being given that the parents, or parent, are extremely poor or sick, and that the services of the child are actually needed to support such parents or parent; or that such child is being taught in a private school or by a private tutor, or at

home by any person capable of teaching in such branches as are usually taught in the primary and grammar schools of this State; or that no public school is located within 2 miles, by the nearest traveled road, of the residence of the child; or that the child has completed the prescribed grammar-school course; then it shall be the duty of such board of education or board of trustees, upon application of the parent, or guardian, or other person having the control or charge of such child, to excuse such child from attendance at school during the continuance of such defect or condition upon which such excuse is granted: *And provided further*, That circumstances rendering attendance impracticable or dangerous to health, owing to unusual storm or other sufficient cause, shall work an exemption from the penalties of this act. If any parent or guardian or other person having control or charge of any such child presents proof to such board of education or board of trustees, by affidavit, that he is unable to compel such child to attend school, said parent, guardian, or other person shall be exempt from the penalties of this act, as regards the subsequent nonattendance at school of such child, and said child may, in the discretion of such board, be deemed a truant and subject to assignment to the parental school.

Any parent, guardian, or other person having control or charge of any such child, who shall fail to comply with the provisions of this act, shall, unless excused or exempted therefrom as hereinbefore provided, be deemed guilty of a misdemeanor, and upon conviction shall be liable, for the first offense, to a fine of not more than \$10 or to imprisonment for not more than five days, and for each subsequent offense he shall be liable to a fine of not less than \$10 nor more than \$50, or to imprisonment for not less than five days nor more than twenty-five days, or to both such fine and imprisonment.

The board of education of any city or city and county, or the board of trustees of any school district, shall, on the complaint of any person, make full and impartial investigation of all charges against parents or guardians or other persons having control or charge of any such child, for violations of any of the provisions of this act. If it shall appear upon such investigation that any such parent or guardian or other person has violated any of the provisions of this act, it is hereby made the duty of the secretary of such board of education, except as hereinafter provided, or the clerk of such board of trustees, to make and file in the proper court a criminal complaint against such parent, guardian, or other person, charging such violation, and to see that such charge is prosecuted by the proper authorities: *Provided*, That in cities and in cities and counties having an attendance officer or officers such officer or officers shall, under the direction of the board of education or the city superintendent of schools, make and file such complaint and see that such charge is prosecuted by the proper authorities.

The board of education of any city, or city and county, may appoint and remove at pleasure one or more attendance officers of such city or city and county, and shall fix their compensation, not exceeding \$1,000 per annum for any such officer, payable from the county or special school fund of such city or city and county, and shall prescribe their duties, not inconsistent with law, and make rules and regulations for the performance thereof: *Provided*, That in any city or city and county containing less than 20,000 school census children not more than one attendance officer shall be appointed, and in any city or city and county containing more than 20,000 school census children not more than one attendance officer shall be appointed for each 20,000 school census children or fraction greater than one-half thereof.

It shall be the duty of the attendance officer to arrest during school hours, without warrant, any child between 8 and 14 years of age, found away from his home, and who has been reported to him by the teacher, the superintendent of schools, or other person connected with the school department, as a truant from instruction upon which he is lawfully required to attend within the city, or city and county. He shall forthwith deliver the child so arrested either to the parent, guardian, or other person having control or charge of such child, or to the teacher from whom said child is then a truant; or if such child shall have been declared an habitual truant, he shall bring such child before a magistrate for commitment by him to a parental school, as provided in this act. The attendance officer shall report promptly such arrest, and the disposition made by him of such child, to the school authorities of such city or city and county. Any child may be reported as a truant, in the meaning of this act, who shall have been absent from school without valid excuse more than three days or tardy on more than three days, any absence for a part of a day being regarded as a tardiness. Any child who has once been reported as a truant and who is

again absent from school, without valid excuse, one or more days, or tardy on one or more days, may again be reported as a truant. Any child may be deemed an habitual truant who shall have been reported as a truant three or more times. Any child who has once been declared an habitual truant and who, in a succeeding year, is reported as a truant from school one or more days or tardy on one or more days without valid excuse, may be again declared an habitual truant.

The board of education of any city, or city and county, may establish schools in a manner hereinafter prescribed, or set apart rooms in public school buildings, for children between 8 and 14 years of age who are habitual truants from instruction upon which they are lawfully required to attend, or who are insubordinate or disorderly during their attendance upon such instruction or irregular in such attendance. Such school or room shall be known as a parental school. A parental school, as herein designated and provided for, shall be one of the primary and grammar schools of the city or city and county, and the teachers therein shall have the same qualifications and be employed and paid in the same manner as in other primary and grammar schools; but such parental school shall be established and maintained specially for the instruction therein of such pupils, between the ages of 8 and 14 years, as shall be committed thereto as provided in this act, and no pupil shall be committed to or required to attend such school except as in this act provided. Said board of education may make such special rules and regulations for the government of a parental school as shall be consistent with the provisions and purposes of this act and not contrary to law. Such board may provide for the detention, maintenance, and instruction of such children in such schools; and such board or the city superintendent of schools in any city, or city and county, may, after reasonable notice to any such child and an opportunity for the child to be heard, and with the consent of the parent, guardian, or other person having control or charge of such child, order such child to attend such school or to be detained and maintained therein for such period and under such rules and regulations as such board may prescribe, not exceeding the remainder of the school year. If such parent, guardian, or person having control or charge of such child shall not consent to such order, such child may be proceeded against under this act.

If any child in any city, or city and county, in which a parental school shall be established shall be an habitual truant, or be irregular in attendance at school, within the meaning of these terms as defined in this act, or shall be insubordinate or disorderly during attendance at school, it shall be the duty of the attendance officer or of the secretary of the board of education if there be no attendance officer, to make and file a complaint against such child in the proper court, charging the fact, and to see that such charge is prosecuted by the proper authority; and if the court, upon the hearing of such complaint, shall find that such charge is sustained, the court shall render judgment that such child be committed to and be detained and maintained in a parental school in such city, or city and county, for a term not to exceed the remainder of the current school year: *Provided*, That if the parent, guardian, or other person having control or charge of such child shall, within three days after the retention of such judgment, execute a good and sufficient bond to the board of education of the city, or city and county, in which said court is situated, with sufficient sureties, in the sum of \$200, conditioned that such child will, during the remainder of such current school year, regularly attend some public or private school in such city, or city and county, and not be insubordinate or disorderly during such attendance, such bond to be approved by the judge of said court and be filed with the secretary of the board of education, then such court shall make an order suspending the execution of such judgment so long as the condition of such bond shall be complied with. If the condition of such bond be violated, such court, upon receiving satisfactory evidence of the fact in any action brought therefor, shall make an order declaring such bond forfeited and directing such judgment to be thenceforth enforced. Such board of education may, at any time within one year after any such bond shall be declared forfeited, have execution issued against any or all of the parties to such bond to collect the amount thereof; and all moneys paid or collected on such bond shall be paid over to the parental school fund of such city, or city and county. No fees shall be charged or received by any court or officer in any proceeding under this section. The confinement of any child in a parental school shall be conducted with a view to the improvement of the child, and to its restoration, as soon as practicable, to the school which he would, if not so confined, be required to attend. The city superintendent of schools, or, if there be no city

superintendent, the board of education of any city, or city and county, shall have authority, in their discretion, to parole at any time any child committed to or ordered to attend a parental school, except when such commitment shall be by judgment or order of a court; and when such commitment of any child shall be by judgment or order of a court, such court may, on the recommendation of the city superintendent of schools or the board of education, make an order paroling such child, upon such terms and conditions as shall be specified in the order. The expense incurred by any city, or city and county, in purchasing or renting a school site, erecting or renting a building, and equipping the same for the maintenance of a parental school, shall be paid out of funds other than those collected for the maintenance of schools. The salaries of teachers and the expense for all school supplies in a parental school shall be paid out of the same funds from which similar salaries and expense are paid for primary and grammar schools, but all other expense incurred in the maintenance of such parental schools shall be paid out of the parental school fund.

Whenever any board of education shall determine that it is necessary or expedient for the city or city and county to establish and maintain a parental school, said board shall furnish to the city council, or other governing body of such city or city and county, all necessary and required information and statistics, and if after consideration such city council or other governing body grants its consent for the establishment of such parental school, then the board of education shall furnish to the authorities whose duty it is to levy taxes in such city or city and county, thirty days before the time specified by law for fixing the annual tax rate, an estimate of the cost of purchasing or renting a suitable site, and also an estimate of the cost of renting or erecting a suitable building and equipping the same for occupancy as a parental school and the cost to the city or city and county other than for salaries of teachers and for school supplies of conducting the school for the remainder of the current school year. When, pursuant to such consent by such governing body, such estimates shall have been so made and furnished by the board of education of any city or city and county, it is hereby made the duty of the authorities whose duty it shall be to levy taxes in such city or city and county at the time of levying the taxes to levy a special tax upon all taxable property of said city or city and county sufficient in its judgment to provide the facilities requested by the board of education, and for which such estimates shall have been so furnished. It shall be the duty of the board of education yearly thereafter to present to the authorities of the city or city and county, whose duty it is to levy taxes, on or before the first Monday in July an estimate of the moneys required for conducting the parental school for the school year other than for the salaries of teachers and for school supplies. When such estimate shall have been so presented it shall be the duty of the said authorities to levy a special tax upon the taxable property of said city or city and county sufficient to maintain such school for the year, exclusive of salaries of teachers and expense of school supplies. All taxes in this act provided for shall be computed, entered upon the tax roll, and collected in the same manner as other taxes are computed, entered, and collected; and when collected shall be placed in a separate fund to be known as the "parental school fund," and shall be paid out on the order of the board of education for the purposes set forth in this act: *Provided*, That all moneys so collected for the purchase of sites or buildings or the erection or equipment of buildings for parental school purposes shall be placed in a separate fund to be known as the "parental school building fund," and shall be used solely for the purpose or purposes for which collected, except that after such purpose or purposes shall have been fully accomplished the residue of such fund, if any, may be transferred to said parental school fund.

Two or more school districts or cities may unite in the following manner to form a joint district for the maintenance of a joint parental school: When any board of education or board of school trustees has secured, in the manner as set forth in section 7 of this act, the consent of the legislative body of the city or school district, in which said board of education or board of school trustees holds office, for the union of two or more districts to form a joint parental school district, said board of education or board of trustees shall transmit such information to the board of supervisors of the county of which said city or school district, or districts, forms a part, setting forth at the same time the cities or districts with which said city or district seeks to unite for the maintenance of a joint parental school. When such information has been received by the board of supervisors from all the cities or school districts seeking to be united,

it is hereby made the duty of the board of supervisors, by resolution, to declare such cities or school districts united for the maintenance of a joint parental school, to be known as the joint parental school district of (give the names of the school districts uniting). When the districts have been so united, the boards of education or boards of trustees of the cities or school districts so uniting shall appoint a board of trustees for the joint parental school district, to consist of five members (unless the number of cities or school districts uniting exceeds five), who shall be appointed from the membership of the boards of the several districts or cities uniting, by the respective boards in approximate proportion to the census children between 5 and 17 years of age, in the districts uniting: *Provided, however*, That each district shall be represented by at least one member on the board of trustees of the joint parental school district. The members so appointed to serve for the remainder of the term of office for which they were elected on their respective boards of education or boards of trustees, and when vacancies occur on said board of trustees of joint parental school districts they shall be filled by the board making the original appointment. The superintendent of schools of each of the cities or school districts uniting, shall be ex officio members of the board of trustees of the joint parental school district, without the right to vote. In the management of a parental school within a school district, city, or city and county, the right to transport pupils to and from school at public expense, when, in the judgment of the board of education or board of school trustees, the interest of the pupil demands it, is hereby conferred upon such boards. All the powers and duties by any section of this act conferred or imposed upon the boards of school trustees or boards of education of any city, or city and county, in the management of and the securing of funds for, a parental school within a city or school district, are hereby conferred upon and imposed upon the board of trustees of any joint parental school district in the management of and the securing of funds for the support of a joint parental school: *Provided, however*, That in estimating the expense of maintenance of a joint parental school the amount of money needed for the payment of teachers' salaries and for the furnishing of school supplies shall be included in the estimate of expenses: *And provided further*, That the estimates shall be transmitted to the board of supervisors of the county of which the joint parental school district forms a part. When such estimates shall have been so transmitted, it is hereby made the duty of the board of supervisors to levy a special tax upon the taxable property within the boundaries of the joint parental school district, sufficient to provide the facilities requested by the board of trustees of the joint parental school district, and for which such estimates shall have been furnished, and yearly thereafter when the estimates of the total expense of the maintenance of the joint parental school and increased facilities shall have been furnished the board of supervisors, it shall be the duty of said board to levy a special tax sufficient to maintain the school for the year. All taxes in this act provided shall be computed and entered upon the tax roll and collected in the manner prescribed for the collection of taxes in section 7 of this act: *Provided*, That all moneys so collected shall be collected by the county tax collector and apportioned to the credit of the joint parental school district, and placed in the fund for which they were specially collected. If for sites or buildings, to be placed in a fund known as the joint parental school building fund, to be used exclusively for the purposes for which they were collected, the same as set forth in section 7 of this act. The board of trustees of joint parental school districts shall organize, by the election of one of their number as chairman, and by the election of a secretary, who shall be the city superintendent of schools, or the secretary of a board of education or the clerk of one of the boards of education or boards of trustees of the cities, or school districts united, and such secretary shall serve without additional salary. All moneys in a joint parental school fund shall be paid out on the order of the board of trustees of the joint parental school district for the purposes herein set forth, and in the same manner that funds are paid from the ordinary school funds of a school district.

All fines paid as penalties for the violation of any of the provisions of this act shall, when collected or received, be paid over by the justice or officer receiving the same to the treasurer of the city, or city and county, in which the offense was committed, to be placed to the credit of the parental school fund of such city, or city and county, if there be such a fund, otherwise to the credit of the general school fund of such city, or city and county, or to the county treasurer, to be placed to the credit of the school fund of the school district in which the offense was committed.

Any parent or guardian of any deaf, dumb, or blind child, legally entitled to admission to said institution, shall send such child to said institution until such child shall have been therein for five years, or shall have reached the age of majority, unless such child shall be excused from such attendance by the board of education or board of trustees of the city, city and county, or school district in which such child resides, for the reason that the child's bodily or mental condition is such as to prevent or render inadvisable attendance at said institution, or for the reason that such child is receiving proper instruction at home or in some public or private school. Any parent or guardian failing to comply with the requirements of this section shall be guilty of a misdemeanor and be punishable as provided in section 2 of this act.

Any justice of the peace, or recorder of the city, or city and county, or any justice of the peace of the township in which the school district is located, or in which the offense is committed, shall have jurisdiction of all offenses committed under the provisions of this act.

Character of instruction.—The public schools of California, other than those supported exclusively by the State, shall be classed as high schools, technical schools, and grammar and primary schools (including kindergarten classes). Except in incorporated cities having boards of education, the county or city and county board of education shall provide for a final examination and conferring of diplomas of graduation on those pupils who have satisfactorily completed the course of study provided for the grammar and primary schools of the county. The county board of education, except in incorporated cities having boards of education, must on or before the 1st day of July prescribe the course of study in each grade for the ensuing year. All schools must be taught in the English language. Instruction must be given in the following branches in the several grades in which they may be required, viz: Reading, writing, orthography, arithmetic, geography, nature study, language, and grammar, with special reference to composition; history of the United States and civil government; elements of physiology and hygiene, with special reference to the effect of alcohol and narcotics on the human system; music, drawing, and elementary bookkeeping, humane education: *Provided*, That instruction in elementary bookkeeping, humane education, elements of physiology and hygiene, music, drawing, and nature study may be oral, no text-books on these subjects being required to be purchased by the pupils: *Provided further*, That county boards of education may, in districts having less than 100 census children, confine the pupils to the studies of reading, writing, orthography, arithmetic, language and grammar, geography, history of the United States and civil government, elements of physiology and hygiene, and elementary bookkeeping until they have a practical knowledge of these subjects: *And it is further provided*, That no more than twenty recitations per week shall be required of pupils in the secondary schools, and no pupil under the age of 15 years in any grammar or primary school shall be required to do any home study. Other studies may be authorized by the board of education of any county, city, or city and county, but such studies if so authorized shall be in lieu of a corresponding number of such enumerated studies specified in the preceding section, and not in addition thereto.

Instruction must be given, in all grades of school and in all classes during the entire school course, in manners and morals and upon the nature of alcoholic drinks and narcotics and their effects upon the human system.

Attention must be given to such physical exercises for the pupils as may be conducive to health and vigor of body as well as mind and to the ventilation and temperature of schoolrooms.

No publication of a sectarian, partisan, or denominational character must be used or distributed in any school, or be made a part of any school library; nor must any sectarian or denominational doctrine be taught therein. Any school district, town, or city the officers of which knowingly allow any schools to be taught in violation of these provisions forfeits all right to any State or county apportionment of school moneys; and upon satisfactory evidence of such violation, the superintendent of public instruction and school superintendent must withhold both State and county apportionments.

No school shall be continued in session more than six hours a day; and no pupil under 8 years of age shall be kept in school more than four hours per day. Any violation of the provisions of this section must be treated in the same manner as a violation of the provisions of the preceding paragraph. In all schools of more than two teachers beginners shall be taught by teachers having had two years' experience or by normal school graduates.

Any city, incorporated town, or school district accredited by the last preceding school census with a school population of 300 or more may, by a majority vote of the qualified electors voting at the election held for the purpose of determining the establishment and maintenance of such high school, establish and maintain a high school at the expense of such city, incorporated town, or school district.

Union school districts may be formed, and union schools may be maintained therein, as in this section provided.

When a majority in each district, as shown by the last preceding school census, of the head of families residing in two or more school districts in the same county, shall unite in a petition to the county superintendent of schools for the formation of a union school district, to comprise the districts so petitioning, he shall, within twenty days after receiving said petition, call an election for the determination of the question, and shall appoint three qualified electors in each of the districts petitioning, to conduct the election therein. Said election shall be held separately and simultaneously at the public school house in each of the districts petitioning, and shall be called by posting notices thereof in three of the most public places in each district, one of which places shall be the public school house in each district, at least ten days before said election. Said election shall be conducted by the officers appointed for that purpose, in the manner provided by law for conducting school elections. The ballots at such election, in each district shall contain the words, "For the union school district," and the voter shall write or print after said words on his ballot the word "Yes" or the word "No." It shall be the duty of said election officers in each district to canvass the vote at said election, and report the result to the county superintendent of schools within five days subsequent to the holding of said election.

The powers and duties of boards of trustees in union or joint union school districts shall be such as are now, or may hereafter be assigned by law to boards of school trustees, except as otherwise provided in this section.

The board of trustees of a union or joint union school district may contract, in such manner as they may deem best, for the transportation, to and from school, of such pupils as may seem to such board to be in need of such transportation, and shall pay for such transportation, in the usual manner, out of any funds available for the purpose: *Provided*, That all such contracts for transportation shall be first approved by the county superintendent (or superintendents) of schools of the county (or counties) in which such district is situated.

Text-books.—In compiling or causing to be compiled and adopted a uniform series of school text-books for use in the common schools of the State, as required by section 7 of article 9 of the State constitution, the State board of education shall, within thirty days after the passage of this act, meet and appoint three members of said board, to wit, the governor, the superintendent of public instruction, and one other member of said State board of education as a standing committee on school text-books. The said committee shall be designated and known as the State text-book committee, and shall immediately organize and enter upon the discharge of its duties, and shall have power, subject to the approval of the State board of education, to revise in whole or in part and to manufacture such text-books as are now in use; to compile or cause to be compiled under its direction, and to manufacture such other or additional text-book or books as it may deem necessary or proper for use in the primary and grammar schools (the common schools) of the State; to purchase or hire plates, maps, and engravings of copyright matter; to contract for or lease copyrights for the purpose of being used in compiling, printing, and publishing such books; to provide for the payment of royalties or for the leasing of plates for the making of the whole or any part of a book or books, and to do any and all acts that may be necessary for the purpose of procuring a meritorious uniform series of text-books for use in all the primary and grammar schools of the State of California. Said committee shall have power, subject to the approval of the State board of education, to prescribe and enforce the use of a uniform series of text-books, and to adopt a list of books for supplementary use from which county and city and county boards of education shall select and adopt books for supplementary use in primary and grammar schools in their respective counties and cities and counties, as required by section 1712 of the Political Code. As soon as any text-book shall have been compiled, printed, adopted, and is ready for distribution, it shall be the duty of every county and city and county superintendent of schools in the State to order a sufficient number thereof to give at least one copy of every such book to every

public school district library in the county or city and county in which he is superintendent, and payment therefor shall be made by him by drawing his requisition without the order of the board of school trustees against the library funds of the respective districts in his county or city and county for the cost and remitting the same to the official who has charge of the sale of State school text-books. In cities where the city school superintendent or city board of education is accustomed to draw requisitions upon the library funds, it is hereby made the duty of such superintendents or boards of education to order and pay for copies of books of the State series for their school libraries as hereby provided in lieu of the county superintendents.

Instruction shall be given in the following subjects in the primary and grammar schools of the State in the several grades in which they may be required, viz: Reading, writing, orthography, language lessons and English grammar, arithmetic, geography, history of the United States, elements of physiology and hygiene, vocal music, elementary bookkeeping, drawing, nature study, and civil government; and it shall be the duty of the said text-book committee to revise such of the books of the present State series or publish such new ones in any of the above-mentioned subjects as may be necessary for the proper study and teaching of them, and for the purposes of compilation and publication may make use of any copyright matter deemed suitable, and may purchase or hire plates, maps, or engravings of such copyright matter, may contract and arrange for the payment of royalties, and shall designate such book or books, when published, as belonging to and forming a part of the State series of school text-books, subject to the approval of the State board of education.

The said text-book committee shall elect a secretary, who shall be a person of recognized educational ability and experience, who shall be provided with an office at the State capitol, in Sacramento, in connection with that of the superintendent of public instruction, and who shall keep the books, accounts, and all records of the said committee and perform such other duties as may from time to time be required of said secretary by said committee. Said secretary shall hold office at the pleasure of the committee and shall receive a salary of \$165 per month, payable monthly in the same manner and from the same fund as the salaries of State officers are paid.

The said text-book committee may secure copyrights in the name of the people of the State of California to any book that may be compiled under this act, and whenever any one or more of the State school text-books shall have been compiled, published, and adopted, the superintendent of public instruction shall issue an order to all county and city and county boards of education by sending notice by registered mail to the secretaries of all such boards requiring the uniform use of said book or books in all the primary and grammar schools of this State, and when said order shall have thus been given and published, the same shall remain in force and effect for a term of not less than four nor more than eight years: *Provided*, That said order for the uniform use of said book or books shall not take effect until the expiration of at least one year from the time of the completion, purchase or the leasing of the electrotype plates of said book or books; but nothing in this act shall be construed to prevent any county, city, or city and county from adopting any one or more of the State series of school text-books whenever said book or books shall have been published and is ready for distribution: *Provided further*, That whenever any plates, maps, or engravings of any publisher or author are adopted for use as hereinbefore provided, the State text-book committee shall enter into a contract for not less than four nor more than eight years for the use of the same, and shall require a good and sufficient bond of the owner of such plates, maps, or engravings, guaranteeing that the same shall be kept revised and up to date, as may be required by the State board of education.

Any county, city and county, city or school district that refuses or neglects to use the State series of school text-books in the grades and in the subjects for which they are intended and at the time required in the foregoing subdivisions of this act must, upon satisfactory proof of such refusal or neglect, have the State money to which it is otherwise entitled withheld from it by the superintendent of public instruction.

The superintendent of State printing shall have the supervision of all mechanical work connected with the printing and publishing of such books as may be compiled and adopted by said text-book committee and approved by the State board of education; and all such printing and binding shall be done in the State printing office. The superintendent of State printing shall

annually on the 1st day of July, and oftener, if requested, submit to the said text-book committee a detailed statement showing the number and name of books of the State series published by him during each year.

Whenever any book authorized to be published under this act is ready for sale or delivery to pupils, the State printer shall submit to the said State text-book committee, and it in turn to the State board of education, an itemized statement showing the exact cost of the material, printing, binding, and finishing of such book in editions of 5,000 or more, and the State board of education shall thereupon determine and fix the price of such book, as required by law, by adding to the cost of manufacturing the price contracted to be paid as royalty, or for the use of the plates, maps, or engravings of the copyright matter therein contained, and said price shall be deemed to be the whole cost of publication of such book at Sacramento. The amount fixed for royalty or cost of plates of copyright matter shall, as the books are sold, be kept separate from other proceeds from the sale of State school text-books and deposited in the State treasury to the credit of a fund to be designated and known as the "text-book royalty fund," the same to be paid out quarterly or semiannually, as may be agreed between the owners of copyright matter and said text-book committee, on the order of the said State text-book committee, in payment of royalties or hire of plates, maps, or engravings of copyright matter in the same manner as other claims upon the State treasurer are paid.

The sum of \$20,000 is hereby appropriated, out of any money in the State treasury not otherwise appropriated, for the purpose of carrying out the provisions of this act. Said appropriation, which shall be known as the "text-book appropriation," shall be subject to the drafts of the said text-book committee for all the expenses incurred by it, except the salary of the secretary, which is otherwise provided for in this act: *Provided*, That all claims shall be presented to the State board of examiners for their approval; said appropriation shall be subject to the drafts of the said committee for all moneys needed for the payment of royalties, for the purchase or hire of such plates, maps, or engravings that may be necessary but which can not be arranged to be paid for as provided in subdivision seventh hereof, for expert opinions as provided for in subdivision 9 of this act, for printing, stationery, postage, and expressage that will be required by said committee, and for manufacturing any edition of any book of the State series now in use or which may hereafter be adopted for use in the primary and grammar schools. It is provided that all moneys that have been received or that may hereafter be received from the sales of State series of school text-books, except that which is received in payment of royalties and provided in this act to be deposited to the credit of the text-book royalty fund, shall be kept by the State treasurer as a separate and distinct fund, to be known as the "State school-book fund," which fund shall be subject to the drafts of the said text-book committee for all expenses incurred by the superintendent of State printing for all material, labor, and other expenses necessary in the mechanical work of printing and publishing State school text-books; all claims to be drawn after being certified to by the superintendent of State printing, as provided in subdivision 4 of section 526 of the Political Code: *Provided*, That all demands on the State school-book fund shall be presented to the State board of examiners in itemized form for their approval; and upon the approval of the State board of examiners, the State controller is hereby authorized and directed to draw his warrant, and the State treasurer is hereby authorized and directed to pay the same, in conformity with the provision of this section.

Before selecting any text-book matter to be used in the compilation or revision of a State school text-book, the said committee may, subject to the approval of the State board of education, secure one or more educational experts to examine and give their opinions on the merits of any book or books or parts of a book that may be taken under consideration, and the claims for payment of such expert service shall be paid in like manner as other claims are paid out of the State text-book appropriation: *Provided*, That the expense of such expert examination and opinion shall not exceed the sum of \$200 for any one book that may be adopted and published as a book of the State series.

Buildings.—The board of trustees of any school district may, when in their judgment it is advisable and on petition of the majority of the heads of families, call an election concerning the issuance of bonds for the purpose of providing one or more schoolhouses. The clerk of each district must, under the direction of the board of trustees, provide all school supplies authorized by law,

keep the schoolhouse in repair during the time school is taught, and exercise a general care and supervision over the school premises and school property during the vacations of the schools.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The proceeds of all lands that have been or may be granted by the United States to this State for the support of common schools which may be or may have been sold or disposed of, and the 500,000 acres of land granted to the new States under an act of Congress distributing the proceeds of the public lands among the several States of the Union, approved A. D. 1841, and all estates of deceased persons who may have died without leaving a will or heir, and also such per cent as may be granted or may have been granted by Congress on the sale of lands in this State, shall be and remain a perpetual fund, the interest of which, together with all the rents of the unsold lands and such other means as the legislature may provide, shall be inviolably appropriated to the support of common schools throughout the State.

The public school system shall include primary and grammar schools and such high schools, evening schools, normal schools, and technical schools as may be established by the legislature or by municipal or district authority; but the entire revenue derived from the State school fund and the State school tax shall be applied exclusively to the support of primary and grammar schools.

Taxation.—The county superintendent of each county having a population of fewer than 340,000 must, on or before the first regular meeting of the board of supervisors, hand in an estimate of the minimum amount of county school fund needed during the year. This amount he must compute as follows: He must calculate 1 teacher for every 70 school census children or fraction thereof not smaller than 20, and then he must calculate the amount required to be raised at \$500 per teacher. From this amount he must deduct the total amount of State apportionment and the remainder shall be the minimum amount of county school fund needed for the ensuing year: *Provided*, That if this amount is less than sufficient to raise a sum equal to \$6 for each census child in the county, then the minimum amount shall be such a sum as will be equal to \$6 for each census child in the county.

The board of supervisors of each county having fewer than 340,000 inhabitants must annually levy a tax to be known as the county school tax, the maximum rate of which must not exceed 50 cents on each \$100 of taxable property in the county nor the minimum rate be less than sufficient to raise a minimum amount reported by the county superintendent. The minimum rate must be determined as follows: The supervisors must deduct 15 per cent from the equalized value of the last general assessment roll, and the amount required to be raised, divided by the remainder of the assessment roll, is the rate to be levied; but if any fraction of a cent occur, it must be taken as a full cent on each \$100. If the county supervisors fail to levy the tax the auditor must, and all money derived from this tax must be paid into the county treasury to the credit of the school fund.

All State school moneys apportioned by the superintendent of public instruction must be apportioned to the several counties in proportion to the number of school census children, as shown by the returns of the school census marshals of the preceding school year: *Provided*, That Indian children whose parents are on Government reservations, or are living in the tribal relation, and Mongolian children not native born, shall not be included in the apportionment list. The superintendent of schools in each county must apportion all State and county school moneys as follows:

He must ascertain the number of teachers each district is entitled to by calculating 1 teacher for every 70 school census children, or fraction of such number not less than 20 school census children, as shown by the next preceding school census; and in cities or districts wherein separate classes are established for the instruction of the deaf, as provided in section 1618 of this code, an additional teacher for each 9 deaf children, or fraction of such number not less than five, actually attending such classes: *Provided*, That all children in any asylum and not attending the public schools of whom the authorities of said asylum are the guardians shall not be included in making the estimate of the number of teachers to which the district in which the asylum is located is entitled.

He must ascertain the total number of teachers for the county by adding together the number of teachers assigned to the several districts.

Five hundred dollars shall be apportioned to each district for every teacher assigned to it: *Provided*, That to districts having 10 and less than 20 school census children shall be apportioned \$400: *Provided further*, That to districts having over 70 school census children, and a fraction of less than 20, there shall be apportioned \$20 for each census child in said fraction.

All school money remaining on hand after apportioning to the districts the moneys provided for in subdivision three of this section must be apportioned to the several districts in proportion to the average daily attendance in each district during the preceding school year. Census children, wherever mentioned in this chapter, shall be construed to mean those between the ages of 5 and 17 years.

Whenever in any school year, prior to the receipt by the counties, cities, or cities and counties of this State, of their State, county, or city school fund, the school districts or cities shall not have sufficient money to their credit to pay the lawful demands against them, the county, city, or city and county superintendent shall give the treasurer of said county, city, or city and county an estimate of the amount of school money that will next be paid into the county, city, or city and county treasury, stating the amount to be apportioned to each district. Upon the receipt of such estimate, it shall be the duty of the treasurer of said county, city, or city and county to transfer from any fund not immediately needed to pay claims against it, to the proper school fund, an amount not to exceed 90 per cent of the amount estimated by the superintendent, and he shall immediately notify the superintendent of the amount so transferred. The funds so transferred to the school fund shall be retransferred by the treasurer to the fund from which they were taken from the first money paid into the school fund after the transfer.

No school district, except one newly formed, is entitled to receive any apportionment of State or county school moneys which has not maintained a public school for at least six months during the next preceding school year. A district which is prevented by fire, flood, or prevailing epidemic from maintaining a school for the length of time designated in this section is nevertheless entitled to its apportionment of State and county school moneys.

No school district is entitled to receive any apportionment of State or county school moneys unless the teachers employed in the schools of such district hold legal certificates of fitness for teaching in full force and effect.

The State school fund must be used for no other purpose than the payment of the salaries of teachers of primary and grammar schools.

The board of school trustees of any district may, prior to the 15th day of August in any year, when in their judgment it is advisable, call an election and submit to the electors of the district the question whether a tax shall be raised to furnish additional school facilities for the district, or to maintain any school in such district, or for building one or more schoolhouses, or for any two or all of these purposes: *Provided*, That where a tax has been collected for the purpose of building a schoolhouse, and the erection of such schoolhouse shall not have been commenced within two years from the time said tax was collected, the custodian of said money shall return the same to the parties from whom said tax was collected. The board of supervisors must, at the time of levying county taxes, levy the tax voted by the district; but the amount of tax levied by a district in any one year for building purposes must not exceed 75 cents on each \$100, and the maximum rate levied for other school purposes must not exceed 30 cents on each \$100 for any one year.

State high school fund.—There is hereby levied annually for the fifty-fifth and fifty-sixth fiscal years, ending respectively June 30, 1904, and June 30, 1905, an ad valorem tax of $1\frac{1}{2}$ cents upon every hundred dollars of the value of the taxable property of the State, which tax shall be collected by the several officers charged with the collection of State taxes, in the same manner and at the same time as other State taxes are collected, upon all and any class of property, which tax is for the support of regularly established high schools of the State. And it is further enacted that, beginning with the fifty-seventh fiscal year, to wit, July 1, 1906, it shall be the duty of the State controller, annually, between the 10th day of August and the 1st day of September, at the time that he is required to estimate the amount necessary for other school taxes, to estimate the amount necessary to be levied for the support of high schools. This amount he shall estimate by determining the amount required at \$15 per pupil in average daily attendance in all the duly established high schools of the State

for the last preceding school year, as certified to him by the State superintendent of public instruction. This amount the State controller, between the dates above given, must certify to the State board of equalization.

The money in said State high school fund shall be apportioned to the high schools of the State by the State superintendent of public instruction in the following manner: He shall apportion one-third of the annual amount among the county, district, city, union, or joint union high schools of the State, irrespective of the number of pupils enrolled or in average daily attendance therein, except as hereinafter provided; the remaining two-thirds of the annual amount he shall apportion among such schools pro rata upon the basis of average daily attendance as shown by the official reports of the county or city and county school superintendents for the last preceding school year: *Provided*, That such high schools have been organized under the law of the State, or have been recognized as existing under the high school laws of the State and have maintained the grade of instruction required by law of the high schools: *And provided*, That no school shall be eligible to a share of said State high school fund that has not during the last preceding school year employed at least two regularly certificated high school teachers for a period of not less than one hundred and eighty days with not less than 20 pupils in average daily attendance for such length of time, except in newly established high schools wherein the minimum average daily attendance for the first year of one hundred and eighty days may be but 12 pupils and but 1 teacher: *And provided*, That before receiving State aid each school shall furnish satisfactory evidence to the superintendent of public instruction of the possession of a reasonably good equipment of building, laboratory, and library, and of having maintained, the preceding school year, proper high school instruction for a term of at least one hundred and eighty days: *Provided further*, That the foregoing provisions relating to the average daily attendance and the number of teachers employed shall not operate to disqualify any legally established high school existing at the date of the passage of this act from receiving a share of said State high school fund until July 1, 1904.

COLORADO.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State board of examiners—State superintendent—County superintendent—District board—Truant officers.

State board of education.—The superintendent of public instruction, the secretary of state, and the attorney-general shall constitute the State board of education, of which the superintendent of public instruction shall be president. The board shall have power to adopt any rules and regulations not inconsistent with law for its own government and for the government of public schools. It may grant State diplomas and issue normal institute certificates. (See Teachers—Qualifications.)

State board of examiners.—(See Teachers—Appointment, qualifications, and duties.)

State superintendent.—There shall be elected every two years' a State superintendent of public instruction, whose salary shall be \$3,000 a year, and who shall give bond in the sum of \$5,000 with sureties. He shall have an office at the seat of government, where he shall keep the records of his office. He shall decide all points touching the construction of the school law, prepare lists of questions for the use of county superintendents at examinations of teachers, have general supervision of all the county superintendents and of the public schools of the State, prepare and distribute all necessary blanks and blank books, to be charged to the counties at cost; report to the governor concerning the condition of the public schools, the amount of the State school fund apportioned and sources from which derived, with such suggestions and recommendations relating to the affairs of his office as he may think proper to communicate. He shall visit annually such counties as most need his personal attendance, and all counties, if practicable; he shall deliver educational addresses, and shall open a correspondence to enable him to obtain all necessary information relating to the system of public schools in other States. For traveling expenses he shall receive not more than \$500, and the incidental expenses of his office shall be paid in the same manner as are those of other

State officers. He shall apportion the school fund, and may employ an assistant librarian, who shall have charge of the State library. He shall be president of the State board of education and of the State board of examiners and a member of the State land board.

County superintendent.—There shall be elected in each county biennially a county superintendent of public schools, who shall execute a bond in the sum of \$2,000, to be increased at discretion, with two sureties. He shall examine teachers, apportion the general school fund among the districts, supervise the schools of his county, visit each school at least once during the quarter to examine the accounts of district officers, and make a report to the State superintendent containing the abstracts of the reports made to him by the district secretaries, and all such other matters as the State superintendent may direct. The county superintendent may appoint a deputy, who shall receive no compensation from public funds. He also shall appoint directors in districts failing to elect them. He shall record the boundaries of districts. He shall hear appeals from district school boards and of teachers or electors of districts. The salaries of county superintendents shall be fixed according to the classification of the various counties, and mileage for distances necessarily traveled may be allowed him to the amount of \$300 per year. He shall be provided with a suitable office at the county seat, as also with all the office incidentals.

District board.—All school districts which shall continue to exercise undisputedly the prerogatives and enjoy the privileges of a district for the period of one year next succeeding the election of its officers shall be deemed to be a legally formed district. For the purpose of organizing a new district out of a portion of one or more old districts the parents of at least 10 children of school age residing within the limits of the proposed district shall petition the county superintendent in writing, who may call an election to determine the question.

There shall be elected in each school district annually a board of directors. The number of persons that shall constitute each board of directors shall be determined as follows: Districts containing a population of more than 1,000 shall be denominated districts of the first class; districts containing a population of from 350 to 1,000 shall be denominated districts of the second class, and districts containing a population of less than 350 shall be denominated districts of the third class; and districts of the first class shall annually elect one director for five years, while districts of the second and third classes shall annually elect one person to serve for three years as a member of the board; one member of the board of districts of the second and third classes shall be elected as president, one as secretary, and one as treasurer. District boards in first class districts shall fill vacancies until the next annual election.

Each school board shall have power to employ or discharge teachers, mechanics, or laborers, and to fix their salaries; fix the compensation to be allowed the secretary; enforce the general regulations of the State superintendent; fix the course of study, the exercises, and the kind of text-books to be used; provide for school furniture and for everything needed in the schoolhouses or for its own use; rent, repair, and insure schoolhouses, and, when directed by the district, build or remove schoolhouses or purchase or sell school lots. The board may suspend or expel pupils from school; shall determine the number of teachers to be employed and the length of time over and above three months that the schools shall be taught; provide books for indigent children on the written statement of the teachers that the parents of such children are not able to purchase them, and shall furnish free text-books for all pupils when directed to do so by a majority vote of the electors of the district; make an annual report to the county superintendent upon the forms furnished by the superintendent; make a report to the State superintendent when instructed to do so. They shall purchase and display upon the schools the national flag.

The district board of any district of the third class may call a special meeting of the electors, who shall decide as to the location of a schoolhouse, lay a tax to pay teachers, purchase or lease suitable grounds and buildings for school purposes and furnish and repair the same and provide incidentals, procure libraries, books, and stationery for the board, etc., and direct the sale or other disposition of school property.

The secretary of the board of school directors shall give bond, with sureties, and shall annually cause to be taken a census of all persons over 6 and under 21, and shall cause reasonable effort to be made respecting the number of blind and deaf persons 4 to 22. He shall make a report to the county superintendent containing the following facts: The number of persons, male and female, in

his district between the ages of 6 and 21; number of schools, the branches taught, and the number of pupils in each; number of teachers employed and the compensation of each per month; number of days the school was taught during the year; number of pupils enrolled during the year and the average daily attendance; average cost of each school a month for each pupil based upon the total enrollment, and also the average cost based upon the average daily attendance (in estimating these averages the secretary shall take account of the teachers' wages, all current expenses, and 6 per cent interest upon a fair valuation of all property belonging to the district); kind of text-books used; number of volumes in the library of each school; aggregate amount paid teachers during the year and the average monthly pay; number of public schoolhouses, and their value; amount raised by tax in the district during the year for school library; amount raised by subscription or by other means than tax; amount of special tax levied for the support of schools and for buildings, sites, and furniture; amount of money on hand at the beginning of the year last past and the amount received from all other sources. Should the secretary fail to make this report he shall forfeit the sum of \$100 and be responsible for the loss occasioned by his negligence. In districts of the first class the secretary may, and the treasurer shall not, be a member of the board. In districts of the second and third classes both are elected as members of the board.

Truant officers.—(See Schools—Attendance.)

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—No district board shall employ any person to teach in any of the public schools unless such person shall have a license to teach in full force at the time of employment.

The State board of education is hereby authorized to grant State diplomas to such teachers as may be found to possess the requisite scholarship and culture and who may exhibit satisfactory evidence of a moral character and whose eminent professional ability has been established by not less than two years' successful teaching in the public schools of the State. Such diplomas shall supersede the necessity for any and all other examinations by persons holding the same, whether county, city, or local, and shall be valid anywhere in the State. They shall be granted upon public examination upon such branches and terms and by such examiners as the State superintendent, the president of the State university, the president of the State agricultural college, and the president of the State school of mines may prescribe: *Provided*, That the State board of education may, upon the recommendation of the State board of examiners, grant State diplomas without examination to persons who, in addition to good moral character and scholarly attainments, have rendered eminent services in educational work in the State for a period of not less than six years.

The county superintendent shall meet all persons desirous of passing an examination as teachers in some suitable room at the county seat, where he shall examine all applicants in orthography, reading, writing, arithmetic, English grammar, geography, the history of the United States, civil government, physiology, laws of health, the elements of the natural sciences, theory and practice of teaching, and the school law of the State. He may appoint a deputy at \$5 a day to examine persons to whom it would be a hardship to attend at the county seat. If the applicant is to teach in a school of high grade, the examinations shall extend to such additional branches of study as are to be pursued in such school. The certificates shall be of three grades. The first grade shall be valid for three years, the second for eighteen months, the third for nine months. A county superintendent may renew a certificate of the first grade by indorsing such renewal thereon. It shall be deemed a violation of law to grant a certificate of either of the above-named grades without requiring the applicant to pass a thorough and satisfactory examination in the branches required by law and upon questions prepared by the State superintendent, but failure in the elements of the natural sciences shall not prevent the issuance of a third-grade certificate. A certificate of like grade may be issued by the county superintendent upon a first-grade certificate issued in another county.

In school districts of the first class the examination of teachers to fill vacancies may be conducted by the school boards of such districts, and a teacher thus examined and while thus employed shall not be required to hold a certificate

from the county superintendent. In case a certificate is revoked or refused, an appeal may be made to the State board.

The teacher shall, at the close of every term (four months at longest), fill in the statistical summary in the register, and in ungraded schools file the register with the secretary of the district; but in graded schools the register aforesaid shall be filed with the principal or superintendent of the district, in which case the principal or superintendent shall make an abstract of the summaries of all such registers upon blanks prepared by the State superintendent and file the same with the secretary. The teacher, principal, or superintendent who is in charge of the last term of school shall file with the secretary a summary of the statistics for the year; and until these registers, summaries, and abstracts have been filed it shall be unlawful for the officers of any district to draw a warrant for the last month's salary of any teacher, principal, or superintendent whose duty it is to make out such statements.

Preliminary training.—The purpose of the State normal school shall be to impart instruction in the science and art of teaching, with the aid of a suitable practice department, and in such branches of knowledge as shall qualify teachers for their profession. The school shall be under the control of a board of six trustees (appointed with the concurrence of the senate, two to retire annually) and the State superintendent. The normal school is an integral part of the public school system and shall stand upon the same basis as to apportionment of State school funds as union high schools, and shall be subject to the supervision of the State board of education, under which the board of trustees shall exercise their control. The school shall be open to all persons resident in this State who are 16 years of age, without charge for tuition. The school is authorized to grant diplomas to such students as shall have completed the full course of instruction, shall have been recommended by the faculty, and shall have passed a final examination upon the branches embraced in the prescribed course before a board consisting of the State superintendent of schools, a county superintendent, and the principal of the school. This diploma licenses the receiver to teach in any of the public schools of the State. The trustees shall receive \$5 per diem and traveling expenses, and shall report annually to the State board concerning the attendance, the curriculum, and the finances of the school.

Institutes.—The State is divided for the present into 13 normal institute districts. A normal institute for the instruction of teachers and those desiring to teach may be held annually for a term of not less than two weeks in each normal institute district. The county superintendents of each institute district shall annually select not more than three of their number as an executive committee, who, with the advice and consent of the State superintendent and the president of the State normal school, shall determine the time and place of holding the normal institute, and shall select a conductor and instructor for the same. To defray the expense of such institute the executive committee shall require the payment of \$1 registration fee for each person attending, and each county superintendent shall add 5 per cent to the standing in examination of teachers who shall so attend. A fee of \$1 shall be paid for each applicant at a county teachers' examination, or for each renewal or indorsement of a teacher's certificate, and shall be sent to the State superintendent, who shall once a year apportion equally among the 13 normal institute districts all moneys thus forwarded.

When a normal institute of not fewer than two weeks is held the number and names of the persons in attendance shall be certified to the county commissioners, who shall allow \$2 for every person certified, and there shall be paid the sum of \$50 to institutes having at least 20 persons in attendance who have paid registration fees.

No one shall be paid from the fund arising from fees and county appropriations as conductors or instructors unless holding a certificate of qualification for such work from the State board of education on recommendation of the State board of examiners, provided that a member of the State normal school faculty shall be ex officio a conductor of normal institutes.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every public school, except high schools, shall be open for the admission of all children from 6 to 21 years of age residing in the district for at least four school months in each year. A school day shall not exceed six hours.

Every parent or guardian of a child between 8 and 14 years of age shall send such child to a public, private, or parochial school for not less than twenty weeks each year, not less than ten of which shall be consecutive; but if two physicians residing within the district shall certify that the child's bodily or mental condition does not admit of its attendance at school, he shall be exempted during such period of disability; or if in the opinion of the county superintendent he is being instructed at home by a qualified person, he shall not be required to attend school.

No child under 14 years shall be employed by any person or corporation during the school term unless the parent or guardian has fully complied with the foregoing provisions. Anyone employing a child contrary to the law shall be fined not less than \$25 nor more than \$100.

Every minor between 14 and 16 shall attend school one-half of each day, or receive private instruction, until he obtains a certificate from the county superintendent that he can read at sight and write legibly. Every employer shall exact the school attendance or instruction herein required as a condition of employment, under penalty of \$25 to \$100 fine.

School boards in first and second class districts must appoint one or more truant officers and fix their compensation. The truant officer has police power, and must examine into any case of truancy within his district, and shall notify the parent or guardian of the truant child and request that the child be required to attend some school within five days; upon failure of parent or guardian to comply, the truant officer shall make complaint against such parent or guardian in the county court, who upon conviction shall be fined not less than \$5 nor more than \$20, and upon failure to pay such fine may be imprisoned from ten to thirty days.

That upon the trial of any offense as charged herein, before any court of competent jurisdiction, it shall be determined that such prosecution was malicious, then the costs in such shall be adjudged against the complainant and collected as fines in other cases.

Two weeks' attendance at half time or night school shall be considered within the meaning of this article equivalent to an attendance of one week at a day school.

Character of instruction.—The public schools shall be taught in the English language, and the school boards shall have taught in such schools orthography, history, and Constitution of the United States, physiology, laws of health, the elements of the natural sciences, the effect of alcoholic drinks and narcotics, and such other branches of learning and other languages as may be deemed expedient. On the demand of the parents or guardians of 20 or more children of school age, the board of directors may procure efficient instructors and introduce the German or Spanish language as a medium of instruction.

The school board of districts of the first and second classes shall have the power to establish a separate high school whenever they shall deem it expedient, and shall determine the qualifications for admission to such school, and shall exercise all the powers with reference to such high school which are accorded to them in relation to schools of the lower grade. Two or more adjoining districts may elect a high-school committee and establish and maintain a high school.

Kindergartens may be established by the school boards of any district for children 3 to 6, but this shall not change the law as to the taking of the school census or the apportionment of State and county school funds.

Text-books.—The district school board shall determine the kind of text-books to be used, provided that only one kind of text-book of the same grade or branch of study shall be used in the same department of a school, and that after the adoption of any book it shall not be changed in four years unless the price thereof shall be unwarrantably advanced or the mechanical quality lowered or the supply stopped. The board shall also provide books for indigent children on the written statement of the teachers that the parents of such children are not able to purchase them, and shall furnish free text-books for the use of all pupils when authorized to do so by a majority vote of the district. The board shall also require that pupils be furnished with proper books as a condition of membership in school.

Buildings.—The property of the school district is under the control of the district school board, which may acquire or sell the same when directed by a vote of the district to do so. The national flag shall be displayed upon each school-house.

4. FINANCES.

Funds (permanent or special)—State tax—County tax—District tax.

Funds (permanent or special).—The public school fund of the State shall consist of the proceeds of such lands as have heretofore been or may hereafter be granted to the State by the General Government for educational purposes; all estates that may escheat to the State; also all other grants, gifts, or devises that may be made to this State for educational purposes.

The public school fund of the State shall forever remain inviolate and intact. The interest thereon only shall be expended in the maintenance of the schools of the State, and shall be distributed among the several counties and school districts of the State in such manner as may be prescribed by law. No part of this fund, principal or interest, shall ever be transferred to any other fund or used or appropriated except as herein provided. The State treasurer shall be the custodian of this fund, and the same shall be securely and profitably invested as may be by law directed. The State shall make good all losses thereof that may in any manner occur.

The State superintendent shall semiannually apportion the public school income fund among the several counties of the State from which reports have been received, according to the school population.

All fines, penalties, and forfeitures provided by school laws may be recovered by action of debt, in the name of the people of the State of Colorado, for the use of the proper school district or county, and shall, when they accrue, belong to the respective districts or counties in which the same may have been incurred; and the county treasurers, for their counties, are hereby authorized to receive and cause to be placed to the proper credit such forfeitures. Except as otherwise provided by law, all sums of money derived from fines imposed for violation of orders of injunction, mandamus, and other like writs, or for contempt of court, shall be paid into the school fund of the county wherein the contempt or such violation was committed; and the clear proceeds of all fines collected within the several counties of the State for breach of the penal laws, and all funds arising from the sale of lost goods and estrays shall be paid over in cash by the person collecting the same, within twenty days after the collection, to the county treasurer of the county in which the same have accrued, and shall be by him credited to the general county school fund. (For the distribution of the county fund, see Taxation, below.)

State tax.—There shall be assessed and levied annually upon all the taxable property in the State taxes for the support and maintenance of certain State educational institutions, as follows: Two-fifths of 1 mill on each dollar of the assessed valuation of the taxable property of the State for the use of the State University, to be known as the State University fund; one-sixth of 1 mill on each dollar of the assessed valuation of the taxable property of the State for the use of the agricultural college, to be known as the agricultural college fund; one-sixth of 1 mill on each dollar of the assessed valuation of the taxable property of the State for the use of the State school of mines, to be known as the school of mines fund; one-sixth of 1 mill on each dollar of the assessed valuation of the taxable property of the State for the use of the State normal school, to be known as the normal school fund; one-sixth of 1 mill on each dollar of the assessed valuation of the taxable property of the State for the use of the institute for the mute and blind, to be known as the mute and blind fund. Such taxes shall be levied and collected at the same time and in the same manner provided by law for assessments and collection of other State taxes.

County tax.—The county commissioners shall, at the time of levying the tax for county purposes, cause to be levied a tax for the support of schools within the county of not less than 2 mills on the dollar of the assessed value of all taxable property, real and personal, within the county, which tax shall be collected by the county treasurer at the same time and in the same manner as State and county taxes are collected, except that it shall be receivable only in cash. It is hereby made the duty of the county superintendent of schools to certify to the board of county commissioners at this time the amount of money needed per capita to enable each school district in the county to maintain a public school four months in each year, as required by law. In making his estimate the county superintendent shall not take into consideration districts whose school population is less than 15, as shown by the school census preceding the time of making the levy. He shall use as a basis for making his estimate the sum of \$40 per month for the teacher's salary. All other expenses of the school must

be provided for by the board of directors by special tax. It is hereby made the duty of the county commissioners to increase the minimum rate of 2 mills to what shall be required for the purpose as stated above; but if any school district shall fail to certify a special tax for other expenses of the district necessary to maintaining a public school each year four months, the county commissioners shall cause the same to be levied.

The county superintendent shall apportion the funds aforesaid among the districts entitled to the same according to the number of persons of school age as shown by the census lists and reports of the several districts for the school year immediately preceding.

District tax.—The district meeting of third-class districts may order a special tax, not to exceed 15 mills, such as the voters deem sufficient for any of the following purposes: To pay teachers' wages; to hire or purchase property and keep the same in repair; and in districts of the first and second classes a special tax without limit may be voted by the board of directors.

On the petition of 20 legal voters of any school district, the question of issuing bonds for the purpose of erecting and furnishing school buildings or purchasing ground, or for funding floating debts, shall be submitted to the voters; but in no case shall the aggregate bonded debt exceed $3\frac{1}{2}$ per cent of the assessed value of the property of the district.

CONNECTICUT.

1. ORGANIZATION OF THE SYSTEM.

State board of education—*Secretary of the State board*—*Agents of the State board*—*Town school visitors*—*Acting school visitor or superintendent*—*District committee*—*Board of education*—*Town school committee*—*Town high school committee*—*Truant officers*.

State board of education.—There shall be a State board of education, composed of the governor, lieutenant-governor, its secretary, and four persons to be appointed by the general assembly for four years. Three members shall constitute a quorum at the meetings of the board. The term of one member shall expire every year. Vacancies not filled by the general assembly shall be filled by the governor and lieutenant-governor for the unexpired term of office. The board shall have general supervision and control of the educational interests of the State; may direct what books shall be used in all its schools, but shall not direct any book to be changed oftener than once in five years; shall prescribe the form of registers to be kept in said schools and the form of blanks and inquiries for the returns to be made by the various school boards and committees; shall keep itself informed as to and ascertain the condition and progress of the public schools in the State, and shall seek to improve the methods and promote the efficiency of teaching therein, by holding, at various convenient places in the State, meetings of teachers and school officers, for the purpose of instructing in the best modes of administering, governing, and teaching public schools, and by such other means as they shall deem appropriate; but the expenses incurred in such meetings shall not exceed the sum of \$3,000 in any year. It shall, on or before the Monday after the first Wednesday in January in each year, submit to the governor a report containing a printed abstract of said returns, a detailed statement of the doings of the board, and an account of the condition of the public schools, of the amount and quality of instruction therein, and such other information as will apprise the general assembly of the true condition, progress, and needs of public education; but not more than 6,000 copies of the report shall be printed.

The board shall appoint a secretary and shall have the power to appoint agents to secure the due observance of the laws relating to the instruction of children, and to grant, upon public examination, a certificate to teach.

It shall have power to expend the sums of money necessary to execute the powers conferred upon it, and shall semiannually file with the comptroller a certified account of all State moneys received or disbursed by it. All orders for drawing State money shall be signed by the secretary and countersigned by a committee of the board. It shall maintain and have general superintendence of the normal schools.

Secretary of the State board of education.—The State board of education shall

appoint a secretary who shall, under its direction and control, perform such services in the execution of its duties and powers as the board may prescribe, and who shall be paid such salary as the board may determine. The board may also engage such clerks as are necessary to assist the secretary in performing his duties.

Agent of the State board of education.—The board shall have power to appoint an agent to secure the due observance of the laws relating to the instruction of children, and such agent shall make written report of his work to the secretary semiannually.

The State board of education may appoint agents, under its supervision and control, for terms of not more than one year, who shall enforce the law regarding the employment of children under 13 years of age. These agents shall be paid not to exceed \$5 per day for time actually employed and necessary expenses, and their accounts shall be approved by the board and audited by the comptroller. The agents so appointed may be directed by the board to enforce the provisions of the law requiring the attendance of children in school and to perform any duties necessary or proper for the due execution of the duties and powers of the board.

School visitors of towns.—There shall be in every town a board of school visitors, composed of three, six, or nine members, as such town may determine, divided into three equal classes. The first class shall hold office until the next annual town meeting, the second class until the second annual town meeting, and the third class until the third annual town meeting following and until others are elected in their places: *Provided*, That when said board is composed of only three members they shall not be so divided into classes and shall be elected for three years. Should any vacancy occur, the remaining members of the board may fill it till the next annual town meeting, when all vacancies shall be filled in the manner prescribed in the succeeding section, and the ballots shall distinctly specify the vacancy to be filled.

School visitors shall be chosen by ballot. If the number to be chosen be two, four, six, or eight, no person shall vote for more than half of such number. If the number to be chosen be three, no person shall vote for more than two; if five, not more than three; if seven, not more than four; if nine, not more than five. That number of persons sufficient to fill the board who have the highest number of votes shall be elected. In case of a tie, that person whose name stands first or highest on the greatest number of ballots shall be elected.

Each board of school visitors shall annually choose from themselves a chairman and a secretary. They shall prescribe rules for the management, studies, classification, and discipline of the public schools, and, subject to the control of the State board of education, the text-books to be used; shall, as a board, or by a committee by them appointed, examine all persons desiring to teach in the public schools, and give to those with whose moral character and ability to teach they are satisfied, if found qualified to teach reading, writing, arithmetic, and grammar thoroughly, the influence of alcohol and narcotics upon the human system, and the rudiments of geography and history, and, if required by the board, of drawing, a certificate either authorizing the holder to teach in any district in the town so long as desired, without further examination, unless specially ordered, or to teach in any such district during the ensuing term only, or to teach only in a district therein named during such term; and if a person is examined in and found qualified to teach other branches besides those required in all cases, such branches shall be named in his certificate. They shall revoke the certificates of such teachers as shall at any time be found incompetent to teach or to manage a school or fail to conform to the requirements of the board; shall, if the town so direct, employ the teachers for all its public schools, after consulting with the several district committees; shall make proper rules for the arrangement, use, and safe-keeping of the district and high school libraries provided in part by the State, and approve the books selected therefor; shall fill vacancies in district offices, fix sites and approve plans for schoolhouses, and superintend any high or graded public school and evening schools. Town school committees shall annually appoint one or more persons who shall, in October of each year, ascertain the name and age of every person over 4 and under 16 years of age who shall belong to such town on the first Monday of said month, and the place, year, and month when such person last attended school, together with the names of the parents, guardians, or employers of such person and return the same to the town school committee on or before the 20th of October. Unless these returns are duly made no money may be obtained by the school visitors from the State treasury. At the close of each

term the school visitors shall certify to the selectmen that each school had been kept in all respects according to law, and shall submit a report to the town at its annual meeting, all reports and returns being duly sworn to or affirmed.

Acting school visitor.—The board of school visitors shall annually assign the duty of visiting the schools of the town to one or more of their number. If only one is assigned, he shall be called the acting school visitor or superintendent, who shall visit such schools at least twice during each term, once within four weeks after the opening and again during the four weeks preceding the close, at which visits the schoolhouse and outbuildings, school register, and library shall be examined, and the studies, discipline, mode of teaching, and general condition of the school investigated. Half a day shall be spent in each school so visited, unless he is otherwise directed by the board. He shall, one week at least before the annual town meeting, submit to the board a full written report of his proceedings, and of the condition of the several schools during the year preceding, with plans and suggestions for their improvement, which will be presented to the town with the board's report.

Boards of education, town committees, and boards of school visitors may appoint a person, not one of their own number, to be acting school visitor or superintendent of schools, who shall have all the powers, perform all the duties, and receive the pay prescribed by law for acting school visitors, and any town at its annual town meeting may fix the compensation of the acting school visitor or superintendent.

No person shall be eligible for appointment who has not had at least five years' successful experience as a teacher or superintendent or who does not hold a certificate of approval by the State board of education.

The town school committee or board of school visitors or board of education of any town employing not more than 10 teachers may petition the State board of education, or such town may by vote request the State board of education, and the State board of education, when so petitioned or requested, is hereby authorized to appoint an agent, who shall discharge the duties of superintendent. Any town for which a superintendent is appointed under the provisions of this section shall pay one-fourth of the salary of said superintendent and the State shall pay three-fourths.

Acting school visitors shall each receive \$2 a day, or pro rata for a fraction of a day, for the time actually employed in the performance of their duties and such further compensation as the town may fix at an annual meeting.

District committee and board of education.—Each town shall have power to form, unite, alter, and dissolve and completely abolish school districts and parts of districts within its limits, but no new districts shall be formed having fewer than 40 persons 4 to 16 years of age. In the absence of any special appointment the committee of any school district shall be its ex officio agent. Every district shall be a body corporate and have power to erect schoolhouses and furnish them, to establish schools (if failing to do so the town is empowered to act), to establish and maintain a library, to employ teachers (except when the town directs its school visitors to perform that duty) and pay the wages of the teachers it employs, to levy taxes and borrow money for the forementioned purposes, to make all lawful agreements and regulations for education, and to elect its directors, as follows:

Each school district shall choose, by ballot, at the annual meeting, a committee of not more than three persons, a clerk (who shall be sworn), and a treasurer and collector, who shall hold their respective offices for the period of one year and until others are chosen and qualified; and any resident of the district so chosen who shall refuse or neglect to perform the duties of the office shall pay \$5 to said district. The members of the district committee shall be residents of the districts, but the other offices may be filled by any inhabitants of the town to which said district belongs.

Any school district having by its enumeration not less than 200 children between 4 and 16 years of age may at any annual meeting, due notice being inserted in the call therefor, order that its committee shall consist of three persons chosen by ballot, divided into three classes holding office for one, two, and three years, and that annually thereafter one member shall be chosen by ballot to hold office for three years. Should any vacancy occur, the remaining members of the committee may fill it until the next annual district meeting, when all vacancies shall be filled. Whenever any district has appointed its committee as herein provided, such district may, at any special meeting called for the purpose, vote that it will no longer so appoint its committee, and thereupon the terms of office of all the members of its committee shall end at its next

annual meeting, and thereafter its committee shall be appointed according to the provisions of the general law.

In all elections of officers of school districts a majority of the votes cast shall be required to elect unless otherwise expressly provided.

School societies organized under the act of 1855, which are not coextensive with the towns in which they are situated (i. e., are cities?) shall be and remain school districts of the town, but without the jurisdiction of its school visitors, except that each shall annually choose on the third Monday of September, instead of a district committee, a board of education consisting of six or nine persons, who shall be chosen by ballot, one-third to be chosen each year, to serve for three years and until others are elected in their places. That number of persons sufficient to fill the board who have the highest number of votes shall be elected. Said board shall have all the powers and be subject to all the duties of district committees, and shall also have the general superintendence of the public schools in the district and the management of its property; shall lodge all bonds, leases, notes and other securities with the treasurer of said district, unless the same have been intrusted to others by the grantors or the general assembly; pay into the treasury of the district all moneys which they may receive for the support of schools; determine the number and qualifications of the scholars to be admitted into each school; supply the requisite number of qualified teachers; ascertain annually during the first two weeks of September the expense of maintaining the schools under their superintendence during the year ending the 31st day of the previous August and report the same, with the amount of moneys received toward the payment thereof, to the district at a meeting to be held on the third Monday of September in each year; shall at the same time make a full report of their doings and the condition of such schools and all important matters concerning the same, and shall perform all lawful acts required of them by the district or necessary to carry into effect the powers and duties herein defined. In general, shall possess all the powers and be subject to all the duties granted and imposed on the school visitors of the town.

Town school committee.—Any town may abolish all the school districts and parts of school districts within its limits and assume and maintain control of the public schools therein, subject to such requirements and restrictions as are or may be imposed by the general assembly, and for this purpose every such town shall constitute one school district, having all the powers and duties of a school district, with the exceptions hereinafter stated.

All business relating to public schools in such towns shall be transacted at town meetings.

It shall also be the duty of the selectmen to call a special meeting of the town for the purpose of electing by ballot a school committee of the number determined upon at a special meeting held for that purpose, or, if such town shall at such meeting have failed to fix such number, of the number of six, nine, or twelve, as said selectmen may determine.

If the number of the committee to be elected shall be six or twelve, no person shall vote for more than half that number; if the number shall be nine, no person shall vote for more than five; and the six, nine, or twelve persons, as the case may be, receiving at such election the highest number of votes shall be the school committee of said town for the respective terms as hereinafter provided.

The members of such committee so elected shall divide themselves into three equal classes, holding office, respectively, until the second, third, and fourth subsequent annual town elections of said town, at which elections, and every annual election subsequent to the last thereof, two, three, or four members, as the case may be, shall be elected by ballot for a term of three years, in the manner prescribed for the election of school visitors.

The school committee in such town shall have, in general, the powers and duties of district committees and boards of school visitors (q. v.).

Town high school committee.—Any town may choose, by ballot, a committee of no more than 5 residents of the town, who shall have all such powers and duties in relation to public high schools as are by law imposed upon district committees in relation to district schools.

The State board of education may examine any incorporated or endowed high school or academy in this State, and if it appears that said school or academy has a satisfactory high school course of study and sufficient equipment for high school instruction, said board shall approve said school or academy, and any town in which a high school or academy is not maintained shall pay the whole or a part of the tuition fee of scholars attending such schools or academy, and

such town shall be reimbursed therefor by the State [under the terms and conditions of said chapter 138].

Any town in which a high school is not maintained shall pay the reasonable and necessary cost of railway or other transportation of any child who resides with his parents or guardian in said town and who, with the written consent of the school visitors or town school committee, attends a high school in another town: *Provided*, That such high school be approved by the State board of education. Such necessary and reasonable cost of railway or other transportation shall be paid annually by the town treasurer upon the order of the chairman of the board of school visitors or town school committee.

Truant officers.—Every town and the mayor and aldermen of every city having truancy regulations shall annually appoint three or more persons, who alone shall be authorized to prosecute for violations thereof. The selectmen of a town may appoint committees of school districts and janitors of school buildings and other persons special truant officers. The police in the cities, and bailiffs, constables, sheriffs, etc., in their jurisdictions shall arrest all boys between 8 and 16 years of age who habitually wander about the streets or public places during school time, and may stop any boy under 16 years of age during such hours and ascertain whether he be a truant from school, and, if he be, shall send him to such school. (See also under Organization—State board.)

2. TEACHERS.

Appointment and qualifications—Duties—Preliminary training—Meetings.

Appointment and qualifications.—(See under Organization—School visitors.)

No person elected to the office of school visitor or town committee shall be employed as teacher within his town.

No teacher of a public school shall be employed by school visitors, boards of education, district committees, town committees, or high school committees until he has received a certificate of approbation, signed by a majority of the board of school visitors, or by all the committee by them appointed; nor shall any teacher be entitled to any wages, so far as the same are paid out of any public money appropriated to schools, unless he can produce such certificate, dated previous to the opening of his school.

The teacher of every public school shall keep and fill out the school register provided by the State, in the manner and form required, and deliver it at the close of each term to the school visitors; and no teacher shall be entitled to receive any pay unless such register shall have been so kept and filled out during the time for which any payment may be made.

The State board of education shall maintain normal schools as seminaries for training teachers in the art of instructing and governing in the public schools of this State, and such sum as the State board of education may in each year deem necessary for their support, not exceeding in any year \$80,000, shall be annually paid therefor from the treasury of the State on the order of said board. But the board shall not expend any money for any normal school hereafter established until the town, city, or city school district in which it is located shall have agreed in writing with the board to furnish, and shall have furnished, schools in suitable and sufficient buildings in connection with the training department of the normal school. [The board may establish and maintain "model schools" in which the pupils of the normal schools shall have an opportunity to practice modes of instruction and discipline.]

The number of pupils in each school shall be determined by the State board of education. Said board may make regulations governing the admission of candidates. To all pupils admitted to (any ?) normal school all its privileges, including tuition, shall be gratuitous; no persons, however, shall be entitled to these privileges until they have filed with said board a written declaration that their object in securing admission to such school is to become qualified to teach in public schools, and that they intend to teach in the public schools of this State.

The school visitors in each town shall annually, upon request, forward to said board the names of such persons as they can recommend as suitable persons in age, character, talents, and attainments to be received as pupils in said school. The State board of education shall expend the funds provided for the support of

^a May be examined by (a) State board of education, (b) school visitors, (c) boards of education, and (d) town committee.

normal schools, appoint and remove their teachers, and make rules for their management; shall file semiannually with the comptroller, to be audited by him, a statement of the receipts and expenses on account of them, and shall annually make to the governor a report, for transmission to the general assembly, of their condition.

Meetings.—(See under Organization—State board of education.)

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—All parents and those who have the care of children shall bring them up in some honest and lawful calling or employment and instruct them or cause them to be instructed in reading, spelling, writing, English grammar, geography, and arithmetic; and every parent or other person having control of any child over 8 and under 16 years of age whose physical or mental condition is not such as to render its instruction inexpedient or impracticable shall cause such child to attend a public day school regularly during the hours and terms while the public schools in the district wherein such child resides are in session or to elsewhere receive thorough instruction during said hours and terms in studies taught in public schools. But children over 14 years of age shall not be subject to the requirements of this section while lawfully employed to labor at home or elsewhere. But this section shall not be construed to exempt any child who is enrolled as a member of a school from any rule concerning regularity of attendance which has been enacted by the town school committee, board of visitors, or board of education having control of school.

Each week's failure on the part of any person to comply with the provisions of the preceding section shall be a distinct offense, punishable with a fine not exceeding \$5. But said penalty shall not be incurred when it appears that the child is destitute of clothing suitable for attending school and the parent or person having control of such child is unable to provide such clothing, or its mental or physical condition is such as to render its instruction inexpedient or impracticable. All offenses concerning the same child shall be charged in separate counts, joined in one complaint. When a complaint contains more than one count, the court may give sentence on one or more counts and suspend sentence on the remaining counts. If at the end of twelve weeks from the date of the sentence it shall appear that the child concerned has attended school regularly during that time, then judgment on such remaining counts shall not be executed.

Attendance of children at a school other than public shall not be regarded as compliance with the provisions of the laws of the State requiring parents and other persons having control of children to cause them to attend school, unless the teachers or persons having control of such school shall keep a register of attendance in form and manner prescribed by the State board of education for the public schools, which register shall at all times during school hours be open to the inspection of the secretary and agents of the State board of education, and shall make such reports and returns concerning the school under their charge to the secretary of the State board of education as are required from the school visitors concerning the public schools, except that no report concerning expenses shall be required; and it shall be the duty of the secretary of the State board of education to furnish to the teachers or persons having charge of any school, on their request, such registers and blanks for returns as may be necessary for compliance with the provisions of this section.

No child under 14 years of age shall be employed in any mechanical, mercantile, or manufacturing establishment. Any person acting for himself or as agent in any way whatever of any mechanical, mercantile, or manufacturing establishment who shall employ or authorize or permit to be employed in such establishment any child in violation of the preceding section shall be fined not more than \$60, and every week of such illegal employment shall be a distinct offense; *Provided*, That no person shall be punished under this section for the employment of any child when at the time of such employment the employer shall demand and thereafter during such employment keep on file the certificate of any town clerk, or of the teacher of the school where such child last attended, stating that such child is more than 13 years of age, or a like certificate of the parent or guardian of such child in such cases only where there is no record of the child's age in the office of the town clerk and such child has not attended school in this State. Any parent or guardian who shall sign any certificate that his child or

ward is more than 14 years of age when in fact such child or ward is under 14 years of age shall be fined not more than \$60.

No child under 14 years of age who has resided in the United States nine months shall be employed to labor unless such child shall have attended a day school in which instruction has been regularly and thoroughly given in the branches of education required in the public schools during at least twelve weeks or sixty full school days of the twelve months next preceding any month in which such child shall be so employed nor unless six weeks at least of this attendance have been consecutive. Any person who shall employ a child contrary to the provisions of this section shall be fined not more than \$60.

Whenever the school visitors, town school committee, or board of education of any town or district shall by vote decide that a child over 14 and under 16 years of age has not schooling sufficient to warrant his leaving school to be employed, and shall so notify the parent or guardian of said child in writing, the parent or guardian of said child shall cause him to attend school regularly during the days and hours that the public school in the district in which said parent or guardian resides is in session, and until the parent or guardian of said child has obtained from said board of school visitors, town school committee, or board of education a leaving certificate stating that the education of said child is satisfactory to said visitors, town school committee, or board of education: *Provided*, That said parent or guardian shall not be required to cause his child to attend school after the child is 16 years of age. Each week's failure on the part of a person to comply with the provisions of this section shall be a distinct offense, punishable with a fine not exceeding \$5.

No person over 14 and under 16 years of age who can not read and write shall be employed in any town where evening schools are established unless he can produce, every school month of twenty days, a certificate from the teacher of an evening school showing that he has attended such school twenty consecutive evenings in current school year and is a regular attendant. Any person who shall employ a child contrary to the provisions of this act shall be fined not more than \$50.

It shall be the duty of every parent or other person having control of a child under 14 years of age to furnish the employer of such child a certificate signed by the teacher, school visitor, or committee of the school which the child attended, showing that the child has attended school as required by the preceding section. The employer of any such child shall require such certificate, shall keep it at his place of business during the time the child is in his employment, and shall show the same when demanded, during the usual business hours, to any school visitor of the town where the child is employed, or to the secretary or agent of the State board of education. Said certificate shall be evidence that the child has attended school as the law requires.

Any parent, or any person having control of a child, who, with intent to evade the provisions of this chapter, shall make any false statement concerning the age of such child, or the time such child has resided in the United States, or shall instruct such child to make any such false statement, shall be fined not more than \$7 or be imprisoned not more than thirty days.

The school visitors in every town shall, once or more in every year, examine into the situation of the children employed in all its manufacturing establishments, and ascertain whether all the provisions of this chapter are duly observed, and report all violations thereof to one of the grand jurors of the town.

The selectmen in every town shall inspect the conduct of the heads of families, and if they find any who neglect the education of the children under their care may admonish them to attend to their duty; and if they continue negligent, whereby the children grow rude, stubborn, and unruly, they shall, with the advice of a justice of the peace, take such children from those who have the charge of them and bind them out to some proper master or to some charitable institution or society incorporated in this State for the care and instruction of such children—males till 21 and females till 18 years of age—that they may be properly educated and brought up in some lawful calling.

Each city and town may make regulations concerning habitual truants from school, and children between the ages of 7 and 16 years wandering about its streets or public places, having no lawful occupation, nor attending school, and growing up in ignorance, and such by-laws, also respecting such children, as shall conduce to their welfare and to public order, imposing suitable penalties, not exceeding \$20 for any one breach thereof; but no such town by-laws shall be valid until approved by the superior court in any county.

Any boy arrested thrice for truancy, if not immediately returned to school,

shall be taken before a judge of the criminal or police court or any justice of the peace, and if it appear that the boy is idle, vicious, and truant, he may be committed to a reformatory institution. Upon the request of the parent or guardian of any girl between 8 and 16 years of age a warrant may be issued for her arrest, and, the facts appearing against her, she may be sent to a reformatory institution for girls.

Public schools shall be maintained for at least thirty-six weeks in every school district, and no town shall receive any money from the State treasury for any district unless the school therein has been kept during the time herein required, but no school need be maintained in any district in which the average attendance of persons at the school in said district during the preceding year, ending the 31st day of August, was less than eight; and said school shall be open to all children over 4 years of age in the respective districts, without discrimination on account of race or color.

Character of instruction.—In the public schools shall be taught, by teachers found duly qualified by the school visitors or other legally qualified body, reading, spelling, writing, English grammar, geography, and arithmetic, and such other studies, including training in manual arts and the principles of vocal and instrumental music, as may be prescribed by the board of school visitors.

The duties of citizenship shall be taught in the public schools. The State board of education shall prepare and distribute to every school an outline of questions and suggestions relating to said subject, and said outline may be used in said schools.

In addition to the schools required by law in every town, any town may establish and maintain schools of a higher grade within its limits, and for such purpose purchase, receive, hold, and convey any property, build and repair schoolhouses, lay taxes, and make contracts and adopt regulations for the management of such schools.

Any town or school district may establish and maintain a kindergarten school, which any child over 3 and under 7 years of age residing in such town or school district may attend.

Every town and school district having 10,000 or more inhabitants shall establish and maintain evening schools for the instruction of persons over 14 years of age in such branches as the proper school authorities of the town or district shall prescribe, and on petition of at least 20 persons over 14 years of age for instruction in any one study usually taught in a high school, which persons, in the opinion of the board of school visitors, town school committee, or board of education, are competent to pursue high school studies, said town or district shall provide for such instruction.

Every town in which a school has been discontinued shall furnish, whenever necessary, by transportation or otherwise, school accommodations so that every child over 7 and under 16 years of age can attend school. If any town refuses or neglects to furnish such accommodations, the parent or guardian of any child who is deprived of schooling, or any agent or officer whose duty it is to compel the observance of the laws concerning attendance at school, may, in writing, request a hearing by the town school committee, board of school visitors, or board of education, as the case may be, and said officers shall give such person a hearing within ten days after receipt of his written request therefor and shall make a finding within ten days after said hearing.

Text-books.—Any town, at its annual meeting, may direct its school visitors, or board of education or town committee to purchase at the expense of said town the text-books and other school supplies used in the public schools of said town, and said text-books and supplies shall be loaned to the pupils of said public schools free of charge, subject to such rules and regulations as the school visitors or the board of education or town committee may prescribe.

Buildings.—No district shall be entitled to receive any money from the State or town unless it has a schoolhouse and outbuildings satisfactory to the board of school visitors.

No new schoolhouse shall be built except according to a plan approved by the board of school visitors and by the building committee of such district, nor at an expense exceeding the sum which the district may appropriate therefor.

The vote of two-thirds of those present and voting at a meeting of the district shall be necessary to fix or change the site of a schoolhouse; but if such two-thirds vote can not be obtained in favor of any site, the school visitors of any town adjoining the town or either of the towns in which such district is, on

application of the district, shall, after conferring with the school visitors of the town or towns in which such district is situated, fix the site and make return to the town clerk of the town in which such site is to be, and shall receive a reasonable compensation for their services from said district.

Any school district may take land which has been fixed upon as a site, or addition to a site, of a schoolhouse for a public school, and which is necessary for such purposes and for necessary outbuildings and convenient accommodations for its schools, upon paying to the owner just compensation.

Any person willfully injuring a schoolhouse or its appurtenances shall be fined \$20 or imprisoned ninety days, or both. Any person who shall enter a place of instruction with criminal intent shall be imprisoned not more than four years.

No schoolhouse premises may be inclosed with barbed wire, nor, under penalty of from \$25 to \$100, display the flag or emblem of any foreign nation.

4. FINANCES.

Funds (permanent and special)—Taxation.

School fund of Connecticut.—The fund called the school fund shall remain a perpetual fund, the interest of which shall be inviolably appropriated to the support and encouragement of the public or common schools throughout the State, and for the equal benefit of all the people thereof. The value and amount of the fund shall, as soon as practicable, be ascertained in such manner as the general assembly may prescribe, be published, and recorded in the comptroller's office; and no law shall ever be made authorizing said fund to be diverted to any other use than the encouragement and support of public or common schools among the several school societies as justice and equity shall require. (Constitution of Connecticut.)

The income of the school fund which, after deducting all expenses attending its management shall remain in the treasury on the 28th day of February in each year, and also \$1.50 for every person between 4 and 16 years of age belonging to any school district, as ascertained from the last returns of the school visitors, shall annually, as soon as may be after said day, be divided and distributed by the comptroller among the several towns in proportion to the number of persons in each between the ages of 4 and 15 years, as ascertained from said returns; and he shall transmit the amount distributed to each town to its treasurer on the application of its school visitors or of its school committee, if such town constitute but one school district; but no such money shall be transmitted to any town until the comptroller shall have received from its school visitors or committee a certificate signed by them or their chairman and secretary, and substantially in the following form:

We, the school visitors of the town of ———, certify that the schools in said town have been kept for the period required by law during the year ending the 31st day of August last by teachers duly examined and approved, and have been visited according to law; and that all moneys drawn from the public treasury by said town for said year appropriated to schooling have been faithfully applied and expended in paying for teachers' wages, and for no other purpose whatever.

Dated at ———, this ——— day of ———, A. D. ———.

_____,
_____,
_____,
School Visitors.

To the COMPTROLLER.

Whenever it shall be found that the amount of income from the school fund is not sufficient to make a distribution of 75 cents for each enumerated child 4 to 16 years of age, it shall be the duty of the comptroller, upon the written request of the commissioner of the school fund, to draw upon the treasurer to an amount sufficient to make good the deficiency in the income of the school fund to meet the distribution of not less than 75 cents per capita required by law.

Town deposit fund.—The money received from the United States in pursuance of the act of Congress of 1836 shall be or remain deposited with the several towns which have received or shall agree to receive it, on the terms hereinafter specified, in the proportion established by law; and the treasurer shall deliver it to the agents of such towns as have not received it on receiving receipts therefor signed by such agents and a certified copy of the vote of the town to

receive its proportion of said money on the terms and conditions herein specified and appointing an agent to receive the same.

The condition on which any town shall receive its share of the said money shall be that it shall keep the money as a deposit in trust for the State, and account for the same when called for; and that until called for it shall appropriate the entire income thereof annually for the support of public schools therein.

Taxation.—The school visitors and selectmen in each town shall meet as a joint board in June annually and prepare a statement of the estimated cost of maintaining the public schools in the town, and shall immediately notify the committees of the several school districts of the amounts so fixed. They, as a joint board, shall also report the same fact to the town in annual meeting, and in October shall fix the amounts necessary to pay the teachers, for fuel, and other incidental expenses of the schools in the town, and shall notify the districts of the several amounts so fixed. All taxes imposed by any school district shall be levied on the real estate situated therein and the ratable personal property of those persons who belong to said district at the time of laying such tax, and upon any manufacturing or mechanical business subject to taxation. This paragraph shall not apply to towns which have consolidated their school districts the estimates of school expenses of which are prepared by the town school committee and reported to the town meeting.

Local school authorities of places maintaining evening schools shall certify to the comptroller the average number of evening scholars, and the comptroller shall draw his order on the State treasurer to the sum of \$2.25 for each scholar certified, provided the school has had sessions and the authorities have reported progress and condition to the State board.

Every town having a valuation of less than \$500,000 may annually receive from the treasurer of the State upon the order of the comptroller a sum which will enable the town to annually expend for the support of public schools \$25 for each child in average attendance, as determined by the attested school registers for the school year ending July 14: *Provided*, That the said State grant shall be expended only for teachers' wages.

DELAWARE.

1. ORGANIZATION OF THE SYSTEM.

State board—County superintendent—County school commission—District school commissioners.

State board.—The general supervision and control of the free public schools of this State shall be vested in a State board of education, composed of the governor, secretary of state, president of Delaware College, State auditor, and the senior member of each county school commission—seven members in all. The governor shall be president and the auditor secretary. The board shall hold meetings quarterly, during the last week in September, December, March, and June, in the office of the auditor at Dover, and may hold special meetings at the call of the president or secretary. Whenever the board shall consider appeals or other matters concerning free schools for colored children, the president of the State College for Colored Students shall sit as a member of said State board instead of the president of Delaware College. Except the governor, secretary of state, and auditor, each member shall receive \$5 per diem when in attendance upon meetings of the board, not to exceed \$30 in any year. The board shall prepare questions for the examination of teachers, adopt a series of text-books for use throughout the State, and make contracts for rates at which the same shall be furnished to the different districts, and may make any changes in said list or compile a new list at any subsequent meeting if deemed advisable; hear and determine finally all appeals from county school commissions, teachers, applicants for certificates, county superintendents, members of school committees, and boards of education; issue a uniform series of blanks for the reports of teachers and other school officers, and require all records kept and returns made according to such forms. The board shall make a report to each general assembly, setting forth the work done and suggesting any alterations or amendments to school laws which they may deem advisable.

County superintendent.—The general superintendence of all free public schools in each county shall be vested in a county superintendent, appointed by the governor for a term of two years, at a salary of \$1,200 a year. In addition to being a person of good moral character, he must have had at least twenty months' experience as a teacher, must be a graduate of some reputable college or normal school, or else hold an unexpired certificate of the highest grade granted to teachers of the State, and must be a resident of the county for which appointed during his term of office. He shall not engage in any other profession or occupation during his term of office, nor shall any of the duties assigned him by law be performed by deputies.

He shall advise with and assist teachers in all the free schools in his county, see that improved methods of instruction and discipline are introduced, create a general interest in and give a clearer knowledge to the people of his county about schools and school systems. To this end he shall visit each school in his county at least once a year, each visit to be of at least two hours' duration; attend at each stated meeting of the county school commission of his county, and at each stated meeting of the State board of education, and make such report concerning his work and the condition of the schools as the said commission or State board shall require; execute all reasonable orders which the State board shall give him; collect and report the school statistics of his county, and generally shall do all matters and things proper and necessary for the interest and advancement of education in the free public schools of his county. In accordance with the directions of the State board, he shall compile examination papers, hold examinations, make and sign certificates for each successful applicant, and may countersign certificates issued by the other superintendents of the State. He shall hold annually a teachers' institute, which all teachers shall be required to attend. He shall devote his entire time to this work. (See also Teachers—Certificates.)

The supervision of all the free public schools, including those for colored children, in each of the counties of this State, subject to the State board of education, shall be vested in a county school commission for each county. The said commission shall be composed of three members, no more than two of whom shall be of the same political party. They shall be appointed by the governor and hold office for three years, not more than two to be of the same political party.

Each county school commission shall hold meetings quarterly, and special meetings may be held upon the call of any two members. The object of the commission shall be the investigation of the school system throughout the county of its jurisdiction, the methods of instruction and discipline employed in the schools, the performance of their several duties by the various school officers and teachers, and the condition of school property. To this end each commission shall have full authority to visit all the schools in its county, including incorporated schools, and to observe and question the teachers concerning their methods of instruction and discipline, make all needed changes in school districts, and shall examine all reports, hear complaints, and ask and receive the assistance of the county superintendent. Each member of the commission shall receive \$5 for each day's attendance at its meetings, not to exceed \$30 in any year, and shall be allowed mileage in visiting schools not to exceed \$25 a year.

District school commissioners.—Each district shall annually elect a school commissioner to serve for three years. The commissioners shall determine the site, lease or purchase the necessary ground, and build or procure a suitable house for the district, as near the center of the district as possible, and when built or procured it shall not be removed nor another procured without the direction of the school voters at a stated meeting; keep the schoolhouse in good repair, supply it with necessary furniture and fuel, and bring actions, if necessary, for any injury to it; provide a school for the district when and as long as their funds will enable them, and employ teachers; may make regulations for the government of the school, and by these provide for the expulsion of a scholar for obstinate misbehavior; receive and collect all money belonging to, appropriated, or resolved to be raised for the district, and apply the same justly; appoint collectors for the district, and take security by bond; do all acts requisite for effecting the premises, and acts of a majority shall be as effectual in all cases as if done by them all. The school committee shall also annually, at the stated meeting, exhibit a just account of their receipts and expenditures, and a report of all their proceedings, and must pay to their successors in office all money due from them. If for ten days they neglect to do this, they forfeit and must pay, additionally, at the rate of 5 per cent on the sum due.

For these duties the committee may receive no emolument; but for attendance before the auditor they may, on the settlement of their account, be allowed each \$1 per day and 3 cents per mile of necessary traveling.

2. TEACHERS.

Qualifications and duties—Institutes—Preliminary training.

Qualifications and duties.—It shall be unlawful to employ any person to teach in the public schools unless he holds a certificate good in the county where employed.

The county superintendent shall examine, either orally or by printed or written questions, or both, all persons who apply at such times and places as he may appoint. Every applicant of good character found qualified to teach orthography, reading, writing, mental and written arithmetic, geography, botany, drawing, pedagogy, history of the United States, Constitution of the United States and of Delaware, English grammar, physiology and hygiene (with special reference to the effects of alcoholic drinks and narcotics), rhetoric, algebra, geometry, history of education, psychology, zoology, civics, Latin, and natural philosophy shall be recommended to the State board for a professional certificate good for ten years. A first-grade certificate shall be issued by the superintendent to an applicant who shall have attained a grade of 90 in all the subjects in the foregoing list down to and including temperance physiology, which shall be good for five years. Those attaining an average of 75 in same subjects shall receive a second-grade certificate good for two years. If certificate be refused, appeal may be taken to the State board.

At the end of the term every teacher shall make out a report as per blanks furnished by State board and send same to the county commission.

Institutes.—Each county superintendent shall hold a teachers' institute three days each year, and every teacher of the county must attend. At these institutes each superintendent shall give all the information in his power, as well as other instructions such as he may deem advisable, and shall cause a general interchange of views among teachers as to the wants of the schools. For paying the expenses of county institutes an annual appropriation of \$150 shall be made from the school fund.

Preliminary training.—To encourage persons to attend normal schools and prepare for the work of teaching, the State appropriates \$1,000 annually for each county, to be distributed among 12 successful applicants, each to receive \$12 per week, or \$80 per year. They are exempt from examinations after graduating, but must bond themselves to teach two years in the State.

3. SCHOOLS.

Attendance—Character of instruction—Text-books.

Attendance.—The State board has designated several schools in each county, to be known as graded schools, to which pupils from single districts may go after having completed the sixth grade. The said graded schools receive from the State the sum of \$15 for each such pupil per year. There are separate schools for colored persons.

Character of instruction.—The studies required in the public schools are those in which teachers (which see) are examined for a second-grade certificate. All public schools receiving aid from the State shall give instruction in physiology and hygiene, with special reference to the effects of alcoholic drinks, stimulants, and narcotics, instruction to be oral when the pupils can not read.

Text-books.—The school commissioners or trustees of each school district in the State shall furnish the necessary text-books free for the use of all the pupils enrolled in the free schools of the State in the manner hereinafter provided.

The school commissioners or trustees shall order from the publisher or publishers the books which have been adopted by the State board of education for use in the free schools of the State, at the net contract prices at which the publishers have agreed to supply the same, as follows: There shall be a blank order book prepared by the State treasurer for the use of the school commissioners, which shall contain duplicate order blanks, with a printed list of the books which have been adopted by the State board of education, and the net contract prices at which the publishers agree to furnish the same.

Duplicate orders shall be filled out and signed by at least two of the school commissioners, or in case of united or incorporated districts by the president and secretary of the school board; one of these orders shall be forwarded to the State treasurer, to be forwarded to the publisher, and the other shall be kept as a stub in the order book as a voucher.

The State treasurer, on receipt of an order from school commissioners, shall make an entry of the amount of the order against the district in a book kept for that purpose, and shall forward the order at once to the publisher, who shall send duplicate invoices for the same, one to the State treasurer and the other to the district clerk of the school district to which the books are consigned.

The State treasurer shall pay the publisher out of the school fund of the State for books thus supplied, and charge the amounts so paid to the respective districts ordering said books, and deduct the same from the amount to which such districts may be entitled under the school laws of the State; but the State treasurer shall pay no bill for at least thirty days from the time it is rendered, in order that he may be notified by the school commissioners of any error or failure on the part of the publisher to supply the books.

It shall be the duty of the clerk of each school district to distribute the books received as aforesaid to the scholars of the district, or their parents, guardians, or other persons, as they may desire, upon receipt for the same. The clerk of each district shall be responsible for the safe-keeping of the books furnished him, and also for prices of books sold to parents, guardians, scholars, or others. Any money or the value of the books which such clerks shall fail to account for according to law may be recovered in the name of the State by the county superintendent before a justice of the peace, as other accounts, when the amount does not exceed the sum of \$200. Such clerk shall, at the expiration of his term of office, turn over to his successor in office all books on hand and take a receipt for the same, which shall be his voucher in settlement.

It shall be the duty of the school commissioners to provide for the safe-keeping and care of the books, which shall be returned by the pupils at the close of the annual school term to the clerk of the district, or to such other person as the school commissioners shall designate. They shall also keep a separate account of the amount expended for books, and shall report it under a separate item in the annual settlement required by law. The school commissioners may furnish books at cost to pupils who wish to replace books lost or willfully destroyed, or who may wish to own their books, and shall turn the proceeds of all such sales into the school fund of the district and report the amount at the time of the annual settlement to State auditor.

4. FINANCES.

Funds (permanent or special).—Taxation.

*Funds (permanent or special).—*The clear income of the school fund of this State is apportioned among the school districts as follows:

1. The dividends on an investment in 5,000 shares of Farmers' Bank stock, made under act of February 21, 1837; the interest on \$131,750 of a bond of the State of Delaware to the school fund of the said State, at 6 per cent interest, and the interest on the sum of \$5,000 advanced to the county of Sussex under act of February 17, 1837, must be divided, as they fall due, among the counties equally, except that Sussex County is to have, for its schools, the interest on the \$5,000 above mentioned in addition to its one-third of the dividend from the general school fund.

2. All the clear dividends or profits from any other bank stock, securities, or property belonging to said fund, together with the clear sum from fees for marriage and tavern licenses, one-fourth of all money arising from licenses for auctioneering, foreign life-insurance agencies, vending of goods by samples, keeping of traveling jacks or stallions, keeping eating houses, taking photographs, acting as brokers, real-estate agencies, exhibiting circuses, practicing jugglery, selling vinous, spirituous, or malt liquors; also one-fourth of the fees on commissions issued to prothonotaries, clerks of the peace, recorders of deeds, clerks of the orphans' court, and sheriffs, and any other income of said fund, or money directed by law to be paid to the trustee of said fund for distribution, must be apportioned among the several counties according to their white population, as ascertained by the census.

The trustee of the school fund, in apportioning annually the share of its in-

come to each county in the State, must distribute it equally among all the districts in the respective counties, according to the number of teachers.

Taxation.—The school commissioners in each school district must annually assess and levy the sum of \$100, without regard to any vote thereon.

The district meeting shall decide what sum shall be raised for a schoolhouse or a free school.

GEORGIA.

1. ORGANIZATION OF THE SYSTEM.

State board—State school commissioner—County board—District trustees—County school commissioner—Cities.

State board.—The governor, attorney-general, secretary of state, comptroller-general, and State school commissioner shall constitute the State board of education, the governor being president ex officio and the State school commissioner the chief executive officer. The clerk of said commission shall be clerk of the State board and shall keep minutes of its meetings. The board shall meet, upon call of its president or a majority of its members, at the office of the State school commissioner at the capitol, or elsewhere, as the call may designate. Said board may hold in trust for the State any grant or devise of lands or other property made for educational purposes, duly executing the terms of such grants. The board shall constitute an advisory body with whom the State school commissioner shall have the right to consult when in doubt as to his official duty. The board shall also hear and decide appeals from decisions of the State school commissioner upon any question touching the construction or administration of the school laws, which appeals must be made through the county commissioner.

State school commissioner.—He shall be elected by the people for two years; shall have an office at the seat of government, and receive a salary not exceeding \$2,000 a year. He shall be charged with the administration of the school laws and a general superintendence of the business relating to the common schools of the State. He shall prescribe forms for the reports required of subordinate school officers and blanks for their guidance in transacting official business, and from time to time shall transmit to them such instructions as he may deem necessary, which instructions they are bound to follow, but shall have the right of appeal to State board; he shall visit the several counties of the State as often as possible for the purpose of examining into the administration of the school law, inspecting school operations, counseling with school officers, delivering popular addresses, or doing such other things as he may deem subservient to the interests of popular education; see that the proper actions are brought against all officers or agents of the system who are liable to the same for misapplication of funds or for other cause; shall make an annual report to the general assembly containing a statement of the condition and amount of all funds and property appropriated to public education, number of common and public schools of various grades in the State, number of scholars (by sex and color) attending same, branches taught, average cost of instruction per scholar per county, plans for improvement of the schools, number of children of school age in the State, number of private schools and colleges of different kinds in the State, with number of scholars attending (by sex), branches taught, and average cost of tuition per scholar. All necessary traveling expenses incurred in the performance of official duty, postage, and other necessary office expenses, shall be paid by the State; and he shall be entitled to one clerk, who shall also be clerk of the State board. (See also *Finances—Apportionment.*)

County board of education.—Every county in the State shall compose one school district, under the control of a county board of education consisting of five freeholders elected by the grand jury for four years. No person pecuniarily interested in the sale of school books shall be eligible to membership in such board. In counties wherein are local school systems (see *Cities*) the grand jury shall select said county board from outside the territory of such local system. Members of said county board shall receive not to exceed \$2 per day of actual service, but are not exempt from road or jury duty. Judges of the supe-

rior court of a county may remove any member of such board for cause, on the address of two-thirds of the grand jury, and such judges may fill vacancies in such board until the next session of the grand jury. The board shall elect one of their number president. The county school commissioner shall be ex officio secretary, and shall record the proceedings of board meetings, all of which shall be open to inspection. The board shall meet at least once a quarter at the court-house. They shall lay off the county in subdistricts, in each of which they shall establish at least one school each for the white and colored races, which schools shall be as near the center of the subdistrict as practicable, reference being had to population, to any schoolhouse already erected, and to contiguity of white and colored schools.

Whenever in the opinion of the county board the good of the schools demands it, they may appoint three trustees in each subdistrict, to serve each three years, one to retire each year, whose duty it shall be to supervise the school operations of their subdistrict, to visit the schools, and make such recommendations in regard to school interests as may seem best. Such trustees shall recommend applicants to teach, whom the county board shall choose if they be duly qualified and eligible according to law. The trustees shall make written report to the county board once a year; oftener, if the board so require.

In the county board is vested the title to all school property, including that of all subdistricts in the county (see Buildings and grounds, under Schools). The board shall determine the length of term of the schools in their county. They shall hear and determine any local controversy regarding the construction or administration of school law, but either party may appeal to the State school commissioner, through the county commissioner in writing. (See also Schools, Text-books—Finances, Apportionment.)

District school trustees.—(See County board of education.)

County school commissioner.—The county board of education shall select from the citizens of the county a county commissioner of education, for a term of four years, who shall be ex officio county superintendent of the common schools. Before election the several applicants shall be examined (questions furnished by State school commissioner) upon the subjects taught in the common schools, the science and theory of teaching and school government, and such other subjects as the State school commissioner may deem proper. In addition to a satisfactory standing upon said examination, the board shall take into consideration the moral character, business qualifications, and general availability of each applicant; and the county commissioner shall give bond in such sum and with such security as the board may require. By a majority vote the board may remove such county commissioner for cause, but he shall have the right of appeal to the State school commissioner, and thence to the State board of education. In case of a vacancy in the office of county school commissioner, the same shall be filled for the unexpired term in the same manner as for a full term. The county school commissioner shall constitute the medium of communication between the State school commissioner and subordinate school officers; shall visit each school in his county at least once during the term, twice if practicable, and oftener if ordered by county board, and without notice to teachers, for the purpose of instructing in modes of management and teaching and giving such advice and suggestions as he may deem helpful; shall be the agent of the board in procuring school furniture, apparatus, etc., such as the board may order purchased; see that none but the prescribed text-books are used; audit accounts of teachers and others before presenting same to the board for an order for payment; enter in a book a record of all his official acts, which book, with other books, papers, and records pertaining to his office, shall be turned over to his successor; make a report of the year's school operations to the grand jury at the spring term of court, accompanied by his books for examination. He shall be provided with an office in the court-house if there be room, and shall receive such compensation as the county board may determine, not to exceed \$3 per day while actually employed in his official duties; in counties having 60,000 population the boards may pay county school commissioners a salary not to exceed \$1,800 a year. (See also Teachers—Certificates; Institutes.)

Cities.—Any city with 2,000 or more population (or any county or town under special authority of the general assembly) may organize an independent school system and draw its pro rata of all educational funds raised by the State. The chief executive officer of such independent organization shall make the same reports to the State school commissioner as are required of the county school commissioners (see preceding section).

2. TEACHERS.

Certificates—Employment and duties—Institutes.

Certificates.—The county school commissioner shall examine all applicants for license to teach in his county and may invite such persons as he may think proper to assist therein. Applicants shall be examined upon orthography, reading, writing, English grammar, geography, arithmetic, the science and practice of teaching, and physiology and hygiene, with special reference to the effects of alcoholic drinks and narcotics. Said examinations shall be held throughout the State on days fixed by the State school commissioner, who shall also prepare questions therefor, and shall supply the county school commissioner with printed instructions as to grading applicants on a uniform basis, and shall fix the lowest standard for each grade of licenses; and no applicant shall be examined on any other day than those so designated, except where the county board shall order a special examination for good reasons and to meet some special emergency. The county school commissioner shall prepare questions for such special examinations, and licenses granted thereunder shall be valid only until the next examination ordered by the State school commissioner and in the county where issued. Upon the report and recommendation of the county school commissioner the county board shall grant to the applicants licenses of the first, second, or third grade, according to the grade attained, provided they shall have attained at least the lowest grade mark fixed by the State school commissioner for that grade, and there shall be satisfactory evidence (submitted in writing with examination papers) of good moral character. First-grade licenses shall continue in force three years; second grade, two, and third grade, one, in the county where issued. They may be validated in other counties by indorsement of respective county school commissioners. Graduates of colleges are not exempt (since 1899) from such county examinations. The county school commissioner may revoke licenses for incompetency, immorality, cruelty to pupils, or neglect of duty, which revocation shall constitute a dismissal of such teacher, but he may appeal to State school commissioner. Forgery of a license constitutes a felony.

After passing upon the examination papers as hereinbefore provided, if, in the opinion of the county school commissioner, any of them exhibit unusual merit he shall forward same to the State school commissioner, together with his certificate of the good moral and professional character of the applicant; and if the State school commissioner deem said papers to exhibit sufficient merit he shall issue a permanent teacher's license to the applicant, which license shall be revocable only by the State school commissioner for cause.

Employment and duties.—County boards employ teachers. Contracts must be in writing, signed in duplicate. Subdistrict trustees, if any, recommend applicants to county board (which see). Teachers may enter into a supplemental contract with patrons to teach a private elementary school in connection with the common school and to embrace the period allowed by law for the said public term if approved by county board. Teachers shall file with the county school commissioner at the expiration of each term a full report of the whole number of scholars admitted to the school during said term, distinguishing between male and female and colored and white, together with the names of all, the entire and average attendance, branches taught, number studying each branch, and such other statistics as the county or State school commissioner may require; and until such report has been prepared, sworn to, and filed the county school commissioner shall not audit said teacher's salary account. No teacher shall receive pay for any pupil who is allowed to use any other than the prescribed text-books (which see, also Studies, under Schools). County boards may pay teachers fixed salaries or else according to enrollment or attendance. Teachers shall be paid monthly.

Institutes.—The State school commissioner is authorized to organize and establish a county teachers' institute in each county to hold a one-week session in June, July, August, or such other month as he may deem expedient. He may combine the said annual sessions of two or more of such institutes. He shall prepare programmes and syllabi of courses and require county school commissioners, as part of their official duty, to conduct same. He may require all teachers to attend such institutes held in the county of their residence, and county school commissioners and boards may assess and collect fines from members of such institutes for tardiness or absence without good cause, which funds thus collected shall be used in purchasing teachers' libraries for the counties in which collected.

Separate institutes shall be held for white and colored teachers, and not exceeding \$25 may be paid from the educational fund of each county per annum for the purpose of securing the services of an expert in conducting the week's session of the institute of said county, such expert to be selected by the county school commissioner and board of education. Institutes shall be held at the county seat or other place selected by the county school commissioner.

3. SCHOOLS.

Attendance—Studies—Text-books—Manual training—Evening schools—Buildings and grounds.

Attendance.—Admission to all schools of the State shall be gratuitous to all children between the ages of 6 and 18 years residing in the several subdistricts, respectively. Colored and white children shall not attend the same school, and no teacher receiving both in the same school shall receive any compensation out of the common school fund. Children residing in one subdistrict may, in special cases, by permission of the county board, attend school in another subdistrict, and when a school is located near a county line children from the adjoining county may attend, if convenience requires, by concurrent permission of both county boards, and in such cases the teacher shall make out two accounts, one against each county board, in proportion to the number of children in the school from each county.

Studies.—County boards shall prescribe what text-books and books of reference shall be used. (See Text-books.) The Bible shall not be excluded from the common or public schools of the State. Boards shall not introduce any text or miscellaneous book of a sectarian or sectional character, and shall provide for the teaching of physiology and hygiene with special reference to alcoholic drinks and narcotics. (For general branches taught see Teachers—Certificates.)

Text-books.—County (or city) boards of education, in order to prevent excessive rates of charges for school books, may purchase directly from the publishers such books as may be adopted for their schools, and shall supply same to patrons and pupils at cost, or at such an advance as shall cover cost of handling. The board may make such contract with a local merchant or other person, whom they may require to give bond. Pupils, parents, or guardians about to move to another county wherein different books are used may sell their school books to the county at such discount as may cover wear and tear. The boards may arrange to rent books to pupils at just and proper fees and make all proper rules to insure payment of such fees and proper care of books. Copies of all contracts for text-books must be filed with the State board of education within ten days. No county board may change or renew any contract for such books before the expiration of five years without first giving sixty days' notice by newspaper advertisement and sixty days' notice to the publisher party to such contract, and then only by a three-fourths vote of the members of such board in session.

Manual training.—County boards shall have power to organize one or more manual labor schools in each county on such a plan as shall be self-sustaining, which plan shall first be submitted to and approved by the State board of education.

Evening schools.—County boards may establish, at such places as they deem proper within the limits of their jurisdiction, a suitable number of evening schools for the instruction of such youth over 12 years of age as are prevented by their daily avocations from attending day schools.

Buildings and grounds.—County boards shall have power to purchase, lease, or rent school sites; build, repair, or rent schoolhouses; purchase maps, globes, school furniture, and other such things as are necessary for efficient schools; and said boards are vested with the title, care, and custody of all schoolhouses, sites, libraries, apparatus, or other property belonging to the several subdistricts in their respective counties, with all power to control the same as they think will best subserve the interests of public schools. When in the opinion of the board any schoolhouse site has become unnecessary or inconvenient, they may sell the same, such conveyance to be executed by the president or secretary of the board. Boards may provide for the building of schoolhouses either by labor on the part of the citizens or by a tax on the property of the subdistrict.

The State school commissioner, through the several county commissioners, shall cause the public schools of the State to observe arbor day as superin-

tendents and teachers may think best in order to show the pupils the value and beauty of forestry by practical tree planting on school, church, and other public lots, lawns, and highways.

4. FINANCES.

Common school fund—Apportionment—County tax.

Common school fund.—The sources from which the common school fund is derived are as follows: Poll tax; special tax on shows and exhibitions; all tax on the sale of spirituous and malt liquors; dividends upon the stock of the State in the Bank of the State of Georgia, Bank of Augusta, Georgia Railroad and Banking Company; one-half of the proceeds of the Western and Atlantic Railroad, or one-half of the net earnings of said railroad under any change of policy which the State may adopt concerning same; all endowments, devises, gifts, and bequests made or hereafter to be made to the State or State board of education; the proceeds of any commutation tax for military service; all taxes which may be assessed on such domestic animals as from their nature and habits are destructive to other property; all money received by the agricultural department of the State for the inspection of oils and fertilizers in excess of the expenses of said department; the net amount arising from the hire of convicts; money accruing from the lease of oyster lands; such other sums as the legislature may raise from time to time by taxation for educational purposes; fines for illegal granting of diplomas by medical colleges; fines for the sale of rejected illuminating oil or fluids, or for wrongful use of branded vessels for illuminating oil or fluids, payable to the school fund in the county where prosecution is made, as is also one-half of fines for cruelty to animals; gaming contracts—money recovered after six months goes to public school fund of county in which suit is entered; property not returned but assessed—overplus above amount due and costs, goes to educational fund, subject to claim of true owner within four years.

Apportionment.—On the first day of each month the State treasurer shall place to the credit of each county in the State on his books its proportion of the common school fund in the treasury, such proportion to be determined by the State school commissioner, comptroller-general, and treasurer, based upon the scholastic population. Each county school commissioner shall transmit to the State school commissioner an itemized statement of the various sums due and unpaid on the first day of each month by the county board, and when said statements shall have been approved by the State school commissioner, the governor shall issue his warrants upon the treasurer for all funds standing to the credit of each county, or for such part thereof as may be needed to cover said itemized statement, and the treasurer shall draw his check in favor of each county school commissioner accordingly.

County tax.—In any county where a school system is not in existence, or where the common school fund is not sufficient for the support of same, whenever two successive grand juries shall so recommend, an election shall be held to determine whether a local tax shall be collected for school purposes. If two-thirds of the lawful votes cast at such election shall be in favor of such local taxation, the county board of education shall levy an ad valorem tax not to exceed one-fourth of 1 per cent upon all the taxable property, and the tax collector shall collect the same from year to year as other taxes are collected.

ILLINOIS.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—County superintendent—Township school trustees—District board of directors—City and village boards of education.

The State superintendent.—There shall be elected every four years a State superintendent of public instruction, who shall hold his office for four years. He shall take the oath of office, and shall give bond in the penalty of \$25,000 with securities, conditioned for the prompt discharge of his duties as superintendent and for the faithful application and disposition, according to law, of all school moneys that may come into his hands by virtue of his office. His salary shall

be fixed by law as a salary for the services required under the provisions of this act or other law that may be passed. All necessary contingent expenses for books, postage, and stationery pertaining to his office shall be audited and paid by the State as the salary and contingent expenses of other officers are paid. It shall be his duty to keep an office at the seat of government of the State; to file all papers, reports, and public documents transmitted to him by the school officers of the several counties each year separately; to keep and preserve all other public documents, papers, and books relating to the schools coming into his hands as superintendent, and to hold the same in readiness to be exhibited to the governor or to any committee of either house of the general assembly; to keep a fair record of all matters pertaining to the business of his office; to pay without delay all money which may come into his hands by virtue of his office to the officer or person entitled to receive the same in the legal manner; to counsel and advise in such manner as he may deem best, with experienced and practical school-teachers, as to the best manner of conducting common schools; to supervise all the common and public schools in the State; to be the general adviser and assistant of county superintendents of the schools of the State; to address circular letters to county superintendents from time to time, as he shall deem for the interests of schools, giving advice as to the best manner of conducting schools, constructing and furnishing schoolhouses, and examining and procuring competent teachers; to report to the governor the condition of the schools, their number for each preceding year by counties, the number taught exclusively by men and exclusively by women, the number taught by men and women at same time and at different periods, the attendance, the number of persons under 21 years of age, and the number 12 to 21 years that are unable to read and write, the amount of township and county funds, the amount of the interest of the State or common-school fund, and of the interest of the township and county fund annually paid out, the amount raised by an ad valorem tax, the amount annually expended for schools, the number of schoolhouses, their kind and condition, the number of townships and parts of townships in each county, the number and description of books and apparatus purchased for the use of schools and school libraries, the price paid therefor, the total amount purchased and what quantity and how distributed, the number and condition of the libraries, together with such other information and suggestions as he may deem important in relation to the school laws, schools, and the means of promoting education throughout the State, which report shall be laid before the general assembly at each regular session; to make such regulations as may be necessary and expedient to carry into effect the provisions of the school law; to be the legal adviser of all school officers, and when requested by a school officer to give his opinion in writing upon any question arising under the school laws; to hear appeals from county superintendents, they having certified to a written statement of the facts in issue; to grant State certificates to such teachers as may be found worthy to receive them; to be ex officio a member of the board of trustees of the University of Illinois, of the Southern Normal University, of the State board of education,^a and to act as secretary thereof, of the Northern Illinois State Normal School, of the Eastern Illinois State Normal School, of the Western Illinois State Normal School, of the State library board, of the Natural History Museum, of the Lincoln Monument, of the Lincoln Homestead; to report to the general assembly at its regular session the condition and expenditures of the Normal University, and such other information as the State board or the general assembly shall direct; and finally, to visit such of the charitable institutions of the State as are educational and to examine their facilities for instruction, and to prescribe forms for such reports as he may desire from the superintendents thereof. He shall be vested with the following powers: To direct and cause the county superintendent of any county, directors or boards of trustees or township treasurer, or other school officer, to withhold from any officer, township, district, or teacher any part of the common school or township or other school fund until such person or corporation shall have made all schedules, reports, and returns required of him by this act, and until such persons or bodies, unless excused by him, shall have executed and filed all official bonds and accounted for all common school or township or other school funds which have theretofore come into his hands; to require county superintendents to furnish him the information he desires to embody in his report to the general assembly, and

^a See Teachers—Preliminary training.

to require at any time from the township board a report on the condition of schools under its care, and to determine what statistics local officers shall report to county superintendents; to authorize county superintendents to procure such assistance as may be necessary to conduct county institutes; to grant permission to boards of education or boards of directors to establish classes for deaf and for crippled children in their respective schools, and to appoint teachers for such classes in said schools; to require annual reports from the authorities of incorporated towns, townships, cities, or districts having a system under special charter to the same extent as regular school officers are or may be required to make such reports; to require the president, principal, or other proper officer of every organized (whether incorporated or not) institution of learning to make a report that he may exhibit a fair and full statement of the condition of such institutions and of the educational resources of the State. He shall not be interested in the sale of any book or apparatus or furniture used or to be used in any school in the State, and for violation of this provision shall be fined not less than \$25 nor more than \$500, and may be imprisoned in the county jail not less than one month nor more than one year.

County superintendents.—There shall be elected every four years a county superintendent of schools, who shall be sworn in and shall execute a bond with joint and several sureties for \$12,000, to be increased if deemed best, conditioned on the faithful discharge of his duties. In case of vacancy the county board shall appoint a successor. He shall be provided with a suitable office. In counties of not more than 100 schools the time of the superintendent may be limited by the county board; in counties of 50 or fewer schools the limit shall not be less than 150 days in the year; in counties of 51 to 75 schools, not less than 200 days a year; in counties of 76 to 100 schools, not less than 250 days a year. He may, with the approval of the county board, employ the assistants he needs for the full discharge of his duties at a compensation fixed by the county board, but they shall be persons of attainments, versed in the principles and methods of education, familiar with public school work, and competent to visit schools. The county superintendent shall receive in full for all services rendered by him 3 per cent upon the amount of sales of school lands or sales of lands upon mortgage, or sales of real estate taken for debt, including all services therewith; 2 per cent upon all sums distributed, paid, or loaned out by them for the support of schools. For all other duties required of him by law \$4 a day for each day of actual service and \$1 a day for expenses for the number of days actually spent in school visitation. He shall present a sworn-to itemized statement of his per diem compensation and expenses, together with a report of all his official acts or those of his assistants, including a list of all the schools visited. It shall also be his duty to sell township-fund lands, issue certificates of purchase, report to the county board and State auditor, and the other legal duties connected therewith; to number in consecutive order the school districts in his county and to prepare a map of the county showing the same; to register applicants for admission to the State normal universities and to the University of Illinois, and to assist in the examination of the same as directed; to hold annually, under the direction of the State superintendent, an examination for State university scholarships; to visit each school in the county at least once a year, and in the performance of this duty he shall spend at least half the time given to his office, and more if practicable, in visiting ungraded schools, noting the methods and the character of instruction; to direct teachers in the science and art of teaching; to act as the official adviser and constant assistant of the school officers and teachers, carrying out the advice of the State superintendent; to conduct a teachers' institute, and to aid and encourage the formation of other teachers' meetings and to assist in their management, and in every way to improve the condition of common schools; to examine all notes, bonds, mortgages, and other evidences of indebtedness which the township treasurer holds officially; and if he finds that the papers are not in proper form or that the securities are insufficient he shall so state in writing to the board of trustees; to give notice of the election of trustee or director in default of the board's doing so; to hold meetings quarterly for the examination of teachers and to grant certificates, keeping a record of the same; to keep a just and true account of all moneys received and all moneys paid out on account of the institute fund and report to the county board; to report to the county board annually at its first regular meeting; to notify presidents of boards of trustees and clerks of school districts on or before September 30 annually of the amount of money paid by him to the township treasurer, with dates, and to receive and file, on or before the 15th day of July preceding each regular session of the general assembly and at such

other time as may be required by the State superintendent or himself, a statement from the board of trustees of each township, giving such statistics and information as may be called for. He shall have power to require the township board of trustees to report the condition of the schools under it, to recommend the remission of the penalty for failure to report; to renew teachers' certificates at their expiration by his indorsement; to revoke the certificate of any teacher for immorality, or other cause; to direct in what manner township treasurers shall keep their books and accounts; to bring suit against the county collector for failure to pay State auditor's warrant, to remove any school director from office for willful failure to perform the duties of his office; to pay from the State school fund for the support of regularly organized classes for the deaf or for crippled children, and to lease and sell school lands.

Trustees of schools.—Each township is a township for school purposes. Fractional townships containing less than 200 inhabitants may be consolidated with adjacent townships. The school business of the township shall be done by three trustees, one elected by the township annually, to serve three years. The trustees constitute a body politic and corporate, having perpetual existence. No person shall be eligible to the office of trustee of schools unless 21 years of age and a resident of the township, and no two trustees shall reside, when elected, in the same school district nor be eligible to the office of trustee of schools and school director at the same time. In case of vacancy, it shall be filled by popular election. Within ten days after the annual election of trustees the board shall organize by appointing one of their number president, and a person who, though a resident, is neither a director nor a trustee, as treasurer, if there be a vacancy in that office, who shall act as clerk. The board shall hold regular semiannual meetings, and special meetings may be held on the call of the president or two members. At the regular meetings the trustees shall examine all books, moneys, and securities of the corporation; shall ascertain the amount of State, county, and township funds on hand and subject to distribution, and shall apportion the same as follows: Whatever sum may be due for the compensation and the books of the treasurer, and such sum as may be deemed reasonable and necessary for dividing school lands, making plats, etc., and the remainder of such funds shall be divided among the districts or fractions of districts in which schools have been established in accordance with the provisions of the law and the instructions of the State and county superintendents during the preceding year ending June 30, in proportion to the number of children under 21 years in each. The funds thus apportioned shall be placed on the books of the treasurer to the credit of the respective districts, and the same shall be paid out by the treasurer on the order of the directors. The board of trustees of each township shall cause the treasurer, the clerk of the board, the directors of the several districts, or other person, to prepare and forward to the county superintendent a statement exhibiting the condition of the schools for the preceding biennial period, given separately each year, commencing on the 1st of July, which statement shall be as follows:

The whole number of schools which have been taught in each year; what part have been taught by men exclusively, by women exclusively, by men and women at the same time, and what part by men and women at different periods; the whole number of scholars in attendance at all the schools, by sex; the number of teachers, by sex; the highest, lowest, and average monthly compensation given to men and women teachers, giving each item separately; the number of persons under 21 years of age, making a separate enumeration of those above the age of 12 years who are unable to read and write, and the cause of the neglect to educate them; the amount of the principal of the township fund; the amount of interest of the township fund paid into the township treasury; the amount raised by ad valorem tax, and the amount of such tax received into the township treasury; the amount of all other funds received into the township treasury; amount paid for teachers' wages, for schoolhouse lots, for building, repairing, purchasing, renting, and furnishing schoolhouses, for school apparatus, books, and other incidental expenses for the use of school libraries, and as compensation to township officers and others; the whole amount of the receipts and expenditures for school purposes, together with such other statistics and information in regard to schools as the State or county superintendent may require. Any township from which such report is not received in the manner and by the time required by law shall forfeit its portion of the public fund for the next ensuing year, subject to explanation and remission. The township treasurer is made the custodian of all township and district funds, but is subject to removal by the trustees. The board may sell or lease school property, make settlements

with debtors to them in their official capacity, establish a high school if directed to do so by a majority of the electors, lay off the township into one or more school districts, change districts when petitioned for by a majority of each of the districts affected by the change and by two-thirds of the voters in the territory transferred. In case any school district shall for two consecutive years fail to maintain a public school as required by law to do, the trustees of schools of the township or townships in which such district lies shall attach it to one or more adjoining districts. Trustees may not be interested in the profits on any book or apparatus, etc., to be used in any school with which they may be connected, and are personally liable for loss through their neglect of duty.

District board of directors.—In all school districts having a population of fewer than 1,000 inhabitants and not governed by any special act in relation to free schools now in force, there shall be elected a board of 3 directors, elected for three years, one retiring annually. Any person of either sex, married or single, 21 years of age, able to read and write in the English language, shall be eligible, as long as he resides in the district, to the office of school director, if not a member of the board of school trustees; vacancies are filled by a new election. The directors, within ten days after every election, shall meet and organize by appointing one of their number president and another clerk. They shall hold regular meetings at such times as they may designate, and special meetings as occasion may require. No director shall be pecuniarily interested in school affairs. It shall be the duty of the board to make a detailed report of their receipts and expenditures to the voters, and transmit a copy to the township treasurer within five days; to report to the county superintendent within ten days after employment the full names of all persons employed as teachers, the date of the beginning and the end of their contract; to provide for the necessary revenue to maintain free schools in their district in the manner provided; to maintain free schools for at least one hundred and ten days; to adopt and enforce all necessary regulations for the management and government of schools and to inspect them; to appoint teachers, fix and pay their salaries; to direct what branches of study shall be taught, what text-books and apparatus shall be used; to purchase text-books for children of indigent parents; to furnish proper blanks to teachers. In addition, they shall be clothed with the following powers: To use any funds belonging to their district for their records, to pay their clerk if the amount of his services justify it, to dismiss teachers, to assign pupils to the several schools in the district, fix rates of tuition and collect the same; to suspend or expel pupils who may be guilty of gross disobedience or misconduct, and no action shall lie against them for such expulsion or suspension; to appropriate for the purchase of libraries and apparatus any funds remaining after all necessary school expenses are paid; to sell personal property belonging to district when not needed; to grant special holidays; to control and supervise all school buildings; to borrow money and issue bonds therefor to build schoolhouses, purchase sites, and improve and repair buildings; but it shall not be lawful for a board of directors to purchase or locate a schoolhouse site, or to purchase, build, or move a schoolhouse, or to levy a tax to extend schools beyond nine months, without a vote of the people.

Board of education.—Incorporated cities and villages, except such as now have charge and control of free schools by special acts, shall be and remain parts of the school townships in which they are respectively situated and be subject to the general provisions of the school law, except as follows: In all school districts having a population of not fewer than 1,000 and not over 100,000 and not governed in educational matters by any special act, there shall be elected, instead of the directors provided by law in other districts, a board of education, consisting of a president of the board, 6 members, and 3 additional members for every additional 10,000 inhabitants, but in no case to consist of more than 15 members. *One-third* the members shall retire annually, but the president shall be elected annually. The powers of the board shall be all the powers of school directors and to establish and levy tax to support free schools not fewer than six nor more than ten months in each year, except upon petition of the majority of the voters of the district; to repair and improve schoolhouses and furnish them with the necessary fixtures, furniture, apparatus, libraries, and fuel, and have charge of the same; to examine teachers as supplemental to other examination; to employ teachers and to fix the amount of their salaries; to establish schools of different grades and make regulations for the admission of pupils into the same and their government; to buy or lease sites for schoolhouses, with the necessary grounds, if authorized by the voters at an election called in pursuance of a petition signed by at least 500, or one-

fifth of the voters; to employ a competent and discreet person or persons to superintend the schools and to fix the salary of such persons (each superintendent may be required to act as principal or teacher in the schools); to lay off and divide the district into subdistricts, to alter and consolidate the same; to visit all the public schools as often as once a month; to inquire into the progress of scholars and the government of the schools; to prescribe the method and course of discipline and instruction; to expel grossly disobedient or misbehaving pupils, and no action shall lie against them for such expulsion; to dismiss unqualified teachers; to provide fuel and other like necessities as may be required; to appoint a secretary; to annually prepare and publish in some newspaper or in pamphlet form a report of the number of pupils instructed in the year preceding and the several branches of study pursued by them, of the number of persons between the ages of 12 and 21 unable to read and write, and of the receipts and expenditures of each school, specifying the source of such receipts and the objects of such expenditures. They shall appoint truant officers to enforce compulsory-attendance act. They shall see that a national flag is provided for the school, to be used upon appropriate occasions. They may establish kindergartens upon the vote of the district, and classes for deaf and crippled children upon permission of the State superintendent.

In cities having a population exceeding 100,000 inhabitants the board of education shall consist of 21 members, to be appointed by the mayor, by and with the advice and consent of the common council, one-third to retire annually. Any person having resided in a city more than five years next preceding his appointment shall be eligible to membership of such board. The board shall have charge and control of the public schools, and with the concurrence of the city council may erect or purchase buildings, buy or lease sites, issue bonds for providing sites or buildings or to pay bonds, and to borrow money. The board has power to establish, maintain, and support schools, examine, license, employ, pay, and dismiss teachers; may establish parental schools; may form classes for deaf and for crippled children on permission of State superintendent; may create teachers' and employees' pension and retirement funds; has entire superintendence and control of all schools in such cities, with power to enact and enforce all necessary rules for the government and maintenance of the schools.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—No teacher shall be authorized to teach a public school who is not of good moral character, at least 18 years of age if a man, or 17 years if a woman, and who does not possess a certificate of qualifications. The district board of directors or city or village board of education shall employ teachers and fix their pay.

The State superintendent is authorized to grant State certificates which shall be of two grades, the higher of which shall be for life and the lower for five years. Both grades shall only be given after public examination (of which due notice shall be given) in such branches and upon such terms and by such examiners as the State superintendent and the principals of the State [normal] universities may prescribe. Such certificates are revocable for cause.

It shall be the duty of the county superintendent to grant certificates to such persons as may upon due examination be found qualified. They shall be of two grades; those of the first grade shall be valid in the county for two years, and shall certify that the holder is of good moral character, and is qualified to teach orthography, reading (in English), penmanship, arithmetic, English grammar, modern geography, the history of the United States, and effects of alcohol and narcotics. The county superintendent may renew such certificates at their expiration, and may at any time revoke them for cause. For the purpose of examining teachers, the county superintendent shall hold meetings at least quarterly, and oftener if necessary. He shall require a fee of \$1 from every applicant, and for each certificate renewed he shall also charge \$1, which fees shall go to the institute fund.

It shall be the duty of every public school teacher to see that the school property of the district is not unnecessarily damaged or destroyed, and no teacher shall be paid any part of the school funds unless he shall have kept and furnished the schedules or statements required by law, and shall have satisfactorily accounted for all books, apparatus, and other property belonging to the district. Each teacher shall keep correctly daily registers, which shall exhibit the name,

age, and attendance of each pupil, the day of the month and the year, which register shall be handed to the clerk of the board under penalty of loss of pay.

Preliminary training.—There shall be established the Illinois Normal University, the Southern Illinois Normal University, the Eastern Illinois Normal School, the Northern Illinois Normal School, and the Western Illinois Normal School, with the object of qualifying teachers for the common schools of the State by imparting instruction in the art of teaching and all branches of study which pertain to a common school education, in the elements of the natural sciences, including agricultural chemistry, animal and vegetable physiology, in the fundamental laws of the United States and of the State in regard to the rights and duties of citizens, and such other studies as the governing body of each institution may prescribe. Each county shall be entitled to have two pupils instructed gratuitously in each school, and each representative district shall be entitled in each school to a number of pupils equal to the number of representatives in the district, the pupils to be selected from applicants passing the best examination. The Illinois State Normal University is managed and controlled by the "State board of education;" the Southern Illinois Normal University, the Eastern Normal School, the Northern Normal School, and the Western Normal School by boards of trustees not exceeding five each in number. No member of the State board of education or of the board of trustees shall receive any compensation other than his necessary traveling expenses.

In each county adopting township organization the board of supervisors, and in other counties the county court (if authorized by vote of the people), may establish a county normal school for the purpose of fitting teachers for the common schools, which shall be under the county board of education. Two or more counties may unite in establishing a normal school.

Meetings.—The county superintendent shall hold annually a teachers' institute, continuing in session not fewer than five days, for the instruction of teachers and those who may desire to teach, and with the concurrence of the State superintendent procure such assistance as may be necessary to conduct the institute at such time as the schools of the county are generally closed. Two or more counties may hold a joint institute. Instruction shall be free to those who hold certificates good in the county. The time, not exceeding three days in any one term or five days in any one school year, during term time, actually spent by a teacher of any public school in this State in attendance upon a teachers' institute held under the direction of the county superintendent of schools shall be considered time lawfully expended by such teacher, and no deduction of wages shall be made in the teacher's pay.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every person having control of any child between the ages of 7 and 14 years shall annually cause such child to attend for the entire time during which the school attended is in session, which period shall not be less than one hundred and ten days of actual teaching, some public or private day school: *Provided*, That this act shall not apply to any child that has been or is being otherwise instructed for a like period of time in the elementary branches of education or whose physical or mental condition renders its attendance impracticable, or who is excused for good reasons for temporary absence by the principal or teacher in charge of the school which said child attends. For every willful neglect of such duty as prescribed above the offender shall be fined from \$5 to \$20 and costs of suit.

The board of education in cities, towns, villages, and school districts and the board of school directors in school districts shall, at the time of the appointment or election of teachers, appoint one or more truant officers, whose duty it shall be to report all violations of this act to such board of education or board of directors and to enter complaint against and prosecute all persons who shall appear guilty of such violation.

Truant officers so appointed shall be entitled to such compensation as may be fixed by the board and shall be paid out of the distributable school fund. Any fine or penalty mentioned above may be sued for and recovered before any court of record or justice of the peace of the proper county. Any person having control of a child who, with intent to evade the provisions of this law regarding compulsory attendance, shall make a willfully false statement concerning the

age of such child or the time such child has attended school shall forfeit from \$3 to \$20 for the use of the public schools.

It shall be unlawful for any person, firm, or corporation to employ or hire any child under 14 years of age during any portion of any month when the public schools are in session, or before the hour of 7 o'clock in the morning or after 6 o'clock in the evening or for more than eight hours a day. Every person, firm, or corporation employing minors under 16 and over 14 years of age shall keep register, wall lists, age and school certificates of said minors, open to inspection; said minors must be able to read at sight and to write legibly simple sentences, or be in regular attendance at a public evening school. Age and school certificates shall be certified to by the superintendent or principal of the school. Any person, firm, or corporation violating the provisions of this act shall be fined not less than \$5 nor more than \$100 and shall stand committed until fine and costs are paid, and any father, guardian, or person having control of any child under the age of 16 years who permits such child to be employed in violation of this act shall, for each offense, be fined not less than \$5 nor more than \$25, and shall stand committed until fine and costs are paid. The district directors shall have power to assign pupils to the several schools in the district, to admit nonresidents, to fix rates of tuition, to provide that children under 12 years of age shall not be confined in school more than four hours daily, to establish and keep in operation for at least one hundred and ten days of actual teaching in each year, without reduction by reason of closing schools on legal holidays or for any other cause and longer if practicable, a sufficient number of free schools for the accommodation of all children in the district 6 to 21 years of age, and shall secure for all such children the right and opportunity to an equal education in such free schools. It shall be the duty of boards of education in cities and villages to support free schools not fewer than six nor more than ten months.

Character of instruction.—Every public school established shall be for instruction in the branches of education prescribed in the qualifications for teachers and in such other branches, including vocal music and drawing, as the directors, or the voters of the district at the annual election of directors, may prescribe. If the majority of the voters in a township shall vote to establish a township high school, a township board (high school) shall be elected, consisting of five members, which shall enjoy the powers and discharge the duties of directors for such district.

Text-books.—The directors shall direct what branches of study shall be taught and what text-books shall be used in the public schools, and shall strictly enforce uniformity of text-books therein, but shall not permit text-books to be changed oftener than once in four years. The directors shall have power to purchase at the expense of the district a sufficient number of the text-books used to supply children whose parents are not able to buy them. The text-books bought for such purpose shall be loaned only, and the directors shall require the teacher to see that they are properly cared for and returned at the end of each school term.

Buildings.—District directors shall have the control and supervision of all schoolhouses in their district, and may grant the temporary use of them, when not occupied by schools, for religious meetings and Sunday schools, for evening schools and literary societies, and for such other meetings as the directors may deem proper; but they shall not purchase or locate a schoolhouse site, or purchase, build, or move a schoolhouse unless directed by vote of the people.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent and special).—The common school fund of this State shall consist of the proceeds of a 2-mill tax, to be levied upon each dollar's valuation of the property of the State annually until otherwise provided by law, the interest on what is known as the school fund proper being 3 per cent upon the proceeds of the sales of the public lands in the State, one-sixth part excepted, and the interest on what is known as the surplus revenue distributed by act of Congress and made a part of the common school fund by the legislature March 4, 1837.

The State shall pay the interest mentioned in the preceding paragraph at the rate of 6 per cent per annum, to be paid into and become a part of the school fund.

On the first Monday in January in each and every year next after the taking of the census of the State by Federal or State authority, the auditor of public accounts shall ascertain the number of children in each county under 21 years of age, and shall thereupon make a dividend to each county of the sum of the tax and the interest due on the school fund proper and surplus revenue in proportion to the number of children in each county under 21 years of age, and issue his warrant to the superintendent of each county.

All bonds, notes, mortgages, moneys, and effects heretofore accrued or which may hereafter accrue from the sale of the sixteenth section of the common school lands of any township or county, or from the sale of real estate or other property taken on any judgment, or for any debt due to the principal of any township or county fund, and all other funds of every description which have been or may hereafter be carried to and made a part of the principal of any township or county fund by any law, shall forever constitute the principal of the township or county fund, and no part thereof shall ever be distributed or expended for any purpose whatever, but shall be loaned and held to use, rent, or profit, as provided by law. But the interest, rents, issues, and profits arising and accruing from the principal of the township or county fund shall be distributed by the county superintendent on a basis of the number of children under 21 years, if the several townships and parts of townships have kept school in accordance with the law.

All fines, penalties, and forfeitures imposed or incurred in any of the courts of record or before any justice of the peace of the State, except fines, forfeitures, and penalties incurred or imposed in incorporated towns or cities for the violation of the by-laws or ordinances thereof, shall be, when collected, paid to the county superintendent of schools, who shall annually distribute such fines, penalties, or forfeitures in the same manner as the common school funds of the State are distributed.

Taxation.—For the purpose of establishing and supporting free schools for not fewer than six nor more than nine months in each year and defraying all the expenses of every description of the same, the directors of each district and the authorities of each village or city are authorized to levy a tax annually upon the taxable property of the district, village, or city, not to exceed $2\frac{1}{2}$ per cent for educational and $2\frac{1}{2}$ per cent for building purposes. [Note the 2-mill State tax forming a part of the common school fund.] All money raised by taxation for school purposes or received from the State common school fund or other sources for school purposes shall be held by the township treasurer as a special fund for school purposes, subject to the order of the board of education upon warrants signed by the president and secretary thereof.

For the purpose of building schoolhouses or purchasing school sites or repairing and improving the same the directors of any school district, when authorized by a majority of the voters at an election called for the purpose, may borrow money, issuing bonds signed by not fewer than two members of the board of directors, in sums of not less than \$100, at a rate not exceeding 7 per cent per annum, provided that the sum borrowed in any one year shall not exceed 5 per cent, including existing indebtedness, of the taxable property of the district.

INDIANA.

1. ORGANIZATION OF THE SYSTEM.

State board of education (and text-book commissioners)—*State superintendents*—*County board*—*County superintendent*—*Township, town, and city trustees, director, and superintendent*—*Advisory board*—*City boards*—*Truant officers.*

State board of education.—(See Teachers—Appointment, qualifications, etc.; also Schools—Text-books.)

State superintendent.—There shall be elected by the qualified voters of the State at a general election a State superintendent of public instruction, who shall hold his office for two years. His salary shall be \$3,000, \$1,000 for office expenses, and \$600 for traveling expenses annually. He shall be charged with the administration of the system and a general superintendence of the business relating to the common schools, and of the funds and revenues set apart for their support. He shall be provided with a suitable office at the seat of govern-

ment, where the records of his office shall be kept, and at which he shall give a reasonable attendance to the business and duties of the position. He shall render an opinion, in writing, to any school officer asking the same, touching the construction of the school law. He may employ one deputy, salary \$1,500; one clerk at \$1,200, and one stenographer at \$720. He shall make a biennial report to the governor, indicating in general terms the enumeration of the children of the State for common school purposes, the additions to the permanent school fund and the amount of school revenue collected during the year, and the amounts apportioned and distributed to the schools. At each regular session of the general assembly he shall make a brief exhibit of his labors, the results of his experience and observation as to the operation of said system, and suggest the remedy for observed imperfections; of the amount of the permanent school funds and their placement, revenue given by them and arising from other sources, and the estimated value of all other property; of the condition of affairs, with the condition at previous periods, and of such matters as he thinks of interest to the general assembly.

He shall visit each county in the State at least once during his term of office, and examine the auditor's books and records relative to the school funds and revenues, with a view to their security, meet with such officers as may attend his appointment, counseling with teachers and lecturing upon educational topics. To enable him to defray his traveling expenses he shall be allowed \$600 annually. He may require county auditors, superintendents, treasurers, district trustees, clerks, and treasurers to furnish copies of all reports made by them and such other information as he may desire. He may prepare and transmit the forms used in making reports, and shall publish the school laws.

County board.—The county superintendent, the trustees of the townships, and the chairman of the school trustees of each town and city of the county shall constitute the county board of education, which shall meet semiannually at the office of the county superintendent. The board shall consider the general wants and needs of the schools and school property of which they have charge and all matters relating to the purchase of schoolbooks, furniture, maps, etc. The change of text-books, except in cities, and the care and management of township libraries shall be determined by the board, and each township shall conform as nearly as practicable to its action.

County superintendent.—The township trustees of the several townships of each county shall meet at the office of the county auditor every four years and appoint a county superintendent, who shall be a citizen of such county, shall execute a bond in the amount of \$5,000, and shall be removable for cause. He shall examine at least once a month from January to August, inclusive, all applicants for license to teach, and shall license successful competitors, which licenses he may for cause revoke. He shall have general superintendence of the schools of the county; attend each township institute at least once in each year, conducting its exercises; visit each school of the county at least once each year; encourage teachers' institutes and associations, and labor in every practical way to elevate the character of instruction and the condition of the schools; decide questions arising under the school laws, but either party may appeal to the State superintendent. He shall be the intermediary between the State superintendent and the local school authorities (cities having a superintendent may be removed from his jurisdiction, however), and in general shall carry out the orders of the State superintendent. He shall, in case of failure of any trustees to do it, cause an enumeration of the children in any township, town, or city; shall make an annual report to the State superintendent of the enumeration of the children of the county, with the same particular discrimination required of the trustees; shall annually furnish the statistical information which the trustees are required to report to them in such form as may be prescribed by the State superintendent, together with such additional information, embodied in a written report, relative to the conditions of the schools, schoolhouses, and the general progress of education in the county as the State superintendent may require. Failure to make the report of enumeration of children by June 15 causes the county to lose \$25 in the next apportionment of school revenue, and failure to make the other reports required causes the county to lose \$10; both forfeits to be collected from the delinquent superintendent in proceedings before a justice of the peace. He shall cast the apportionment of school revenues from the lists of enumerations and reports of transfers of the several townships, towns, and cities, and report it to the county auditor. He shall receive \$4 per diem for every day actually employed in discharge of his duties, but the board of commissioners may determine the number of days, though they shall not be

fewer than the whole number of schools under the jurisdiction of the superintendent.

Township school trustees and city and town school boards.—Each civil township and each incorporated town or city in the several counties of the State shall be a district municipal corporation for school purposes by the name and style of the civil township, town, or city corporation, respectively, and the trustees of the township and the school board of each city and town shall be school trustees and perform the duties of clerk and treasurer for school purposes. In cities and towns the common council shall annually elect a school trustee for a term of three years. These three trustees shall constitute the school board of the city or town, and shall elect one of their number president, one secretary, and one as treasurer, the last executing a bond, with two securities not members of the board, in a sum double the amount annually coming into his hands; the other officers shall give bond in any sum not less than one-third of the treasurer's.

The school trustees of every township, incorporated town, or city, shall receive the special school revenue belonging thereto, and the revenue for tuition which may be apportioned to the township, town, or city by the State for tuition for the common schools, and shall pay out the same for the purpose for which such revenues were collected and appropriated, reporting annually the particulars to the county commissioners. They shall have charge of the educational affairs of their respective townships, towns, and cities; shall employ teachers, establish and conveniently locate a sufficient number of schools for the education of the children of school age, and build or otherwise provide suitable houses, furniture, apparatus, and other articles and educational appliances necessary for the thorough organization and efficient management of the schools; may establish graded schools, or such modifications of them as may be practicable; shall have the care and management of all property except the Congressional township school lands. They may in cities and incorporated towns employ a superintendent for their schools and prescribe his duties. They shall annually make a report to the county superintendent containing the statistical information furnished by the teachers, and embody in tabular form the following additional items: The number of districts, schools taught and their grade, teachers by sex, average compensation of each grade, balance of tuition revenue on hand at the commencement of the current year, amount received during the year from the county treasurer and the amount expended for tuition, balance on hand, length of time school was taught in days, schoolhouses erected during the year, the cost of the same, the number and kind before erected, and the estimated value thereof and of all other school property, number of volumes in the library and the number taken out during the year and the annual increase, the assessment on each \$100 of taxable property and on each poll of special tax for schoolhouse erection, and the amount of such levy, balance of special school revenue on hand at the commencement of the current year, amount received during the year from the county treasurer, the amount expended during the year and balance on hand, the number of acres of unsold school lands, their value and income given, together with such other information as may be required by the county or State superintendent. Failure to make the reports required subject the township, town, or city to a loss of \$25 and the trustee in fault shall be liable for all damages arising from his neglect to the locality concerned. (For election and duty of director, see Schools—Buildings.)

Advisory board.—At the time of electing township trustees the voters of the several townships shall elect an advisory board, consisting of three resident freeholders and qualified voters of the township. Their term of office shall be four years. If a vacancy occurs in said board it shall be filled by the remaining members of the board for the unexpired term. They shall meet annually on the first Tuesday of September, at a convenient place in the township. Two members shall constitute a quorum. At such meeting the board shall consider the various estimates of township expenditures proposed by the township trustee, and shall have power to concur in such estimates, or in any part thereof, or to reject any proposed item, in whole or in part. And the advisory board, at the first annual meeting, may apportion the payment of any existing indebtedness other than to the county or for current expenses for a named term not exceeding five years. When they shall have determined upon the estimates and amounts for which taxes should be levied upon the property and polls within said township for the ensuing year, they shall then determine and fix the rates of taxation upon such property and polls as to the estimated purposes severally. The rates so determined by such board they shall then certify to the county

auditor, who shall place the same upon the tax duplicate, and the same shall be collected and enforced as prescribed by law. The rates so prescribed shall be deemed a levy and lien upon the property of such township from and after the first day in April of such year, and such levy shall be deemed an appropriation for the specific purposes for which such estimates are fixed.

City board of school commissioners.—In all cities of 30,000 or more inhabitants there shall be elected by each school district one school commissioner for a term of three years. The board of school commissioners thus formed shall district the city, levy taxes for the support of schools and libraries in addition to those elsewhere authorized, examine applicants for teachers' places, purchase sites, construct buildings, purchase supplies, pay teachers, appoint superintendents, disburse the sums required for the support of schools and libraries, regulate the grading, course of instruction, and government in the schools of the city, and issue bonds in anticipation of the revenue to obtain money, not exceeding in the aggregate \$100,000, for building purposes. All parts of the general school laws not inconsistent with the provision for cities of 30,000 and over hold good for them. The members of the board of school commissioners serve without compensation.

Truant officers.—(See Schools—Attendance.)

2. TEACHERS.

Appointment and duties—Certificates—Preliminary training—Institutes—Salaries.

Appointment and duties.—The trustees of townships, towns, and cities shall employ teachers, but no teacher shall be employed unless holding a license to teach issued by the proper State or county authority and in force at the date of employment; but if the license expire during a term, the teacher may complete that term. A trustee shall not employ a teacher whom the other two trustees have decided at any regular meeting they do not wish to employ. Teachers may be dismissed for cause.

The teacher shall make a complete report to the proper trustee at the end of the term, and until such report has been made the trustee shall not pay more than 75 per cent of the teacher's salary.

Certificates.—The State board of education shall consist of the governor, State superintendent, the presidents of the State university, Purdue University, and the State normal school, the superintendents of common schools of the three largest cities in the State, and three citizens of prominence actively engaged in educational work in Indiana, appointed by the governor, at least one of whom shall be a county superintendent. The board may grant certificates of qualifications to such teachers as may, after a thorough and critical examination, be found to possess eminent scholarship and professional ability and shall furnish satisfactory evidence of good moral character. The certificates the board grants shall be valid during life, and good in any locality for any school. The applicant shall, on making application, pay a fee of \$5.

The county superintendent shall examine all applicants for license as teachers for the common schools of the State by a series of written or printed questions, requiring answers in writing, but questions may also be put and answered orally; and if from the ratio of correct answers and other evidences disclosed by the examination the applicant is found to possess a knowledge sufficient to enable him to successfully teach orthography, reading, writing, arithmetic, geography, English grammar, physiology, the science of education, literature, and the history of the United States, the county superintendent shall license the applicant for the period of six, twelve, twenty-four, or thirty-six months, according to the ratio of correct answers and other evidences of qualification given upon said examination, the standard of which shall be fixed by the county superintendent. In examining persons to teach in graded schools in cities and towns the county superintendent may take into consideration the special fitness of such applicants for the services required of them, noting on the license the kind of work they are specially qualified for. Before being licensed every applicant must produce satisfactory evidence of good moral character. The license for six months, however, shall be regarded as a trial license, and not more than one of the kind shall be granted to an applicant in the same county. Any person who shall receive two thirty-six month licenses in succession may receive at the expiration of the latter a license for eight years after such an examination as may

be prescribed by the State board of education; but such license shall issue only on approval of the State board of education, and shall be styled a professional license, entitling the holder to teach in any school.

Applicants may, if they so elect, have their manuscripts sent to the State superintendent for examination for a license which shall be valid anywhere within the State; in which case each applicant shall pay to the county superintendent a fee of \$1, which shall by him be transmitted to the State superintendent, who shall use such funds in employing qualified persons to grade the manuscripts. In forwarding such manuscripts the county superintendents shall indicate thereon the grade of the applicant's schoolroom success, which shall be given equal weight with his academic standing as shown by said manuscripts in determining his general average.

Preliminary training.—There shall be established and maintained a normal school, the object of which shall be the preparation of teachers for teaching in the common schools of Indiana, which shall be governed by a board of 4 trustees appointed by the governor and approved by the senate. The board shall prescribe the course of study for the normal school, elect the instructors, and fix their salaries, and determine the conditions of admission; but applicants must be 16 years of age if women and 18 if men, of good health, of undoubted moral character, and each shall file a pledge that he or she will, as far as practicable, teach in the common schools of Indiana a period equal to twice the time spent as a pupil in the normal school. Tuition shall be free. The trustees shall make a biennial report to the legislature in years that it meets, and in other years to the governor. The board is authorized to grant certificates of proficiency to such teachers as shall complete any of the prescribed courses of study and whose moral character and disciplinary relations to the school have been satisfactory. After the lapse of two years after graduation, and on satisfactory evidence of professional ability, they shall be entitled to diplomas appropriate to professional degrees entitling them to teach in any school.

Institutes.—At least one Saturday in each month during which the public schools may be open shall be devoted to township institutes or model schools for the improvement of the teachers. The township trustee shall specify in a written contract with each teacher that such teacher shall attend the full session of each institute or forfeit one day's wages for every day's absence therefrom unless the absence is caused by sickness.

In order to the encouragement of teachers' institutes, the county auditors of the several counties of this State shall, whenever the county superintendent of such county shall file with said auditor his official statement, showing that there has been held for five days a teachers' institute in said county, with an average attendance of 25 teachers, or persons preparing to become such, draw his warrant on the county treasurer in favor of said county superintendent for \$35; and in case there should be an average attendance of 40 teachers, or persons preparing to become such, then the said county auditor shall draw his warrant for \$50; and in case there should be an average attendance of 75 teachers, or persons preparing to become such, then he shall draw his warrant for \$100, for the purpose of defraying the expenses of said institute.

Salaries.—The daily wages of teachers for teaching in the public schools of the State shall not be less in the case of beginning teachers than an amount determined by multiplying $2\frac{1}{4}$ cents by the scholarship given said teacher on his highest grade of license at the time of contracting; and after the first school term of any teacher said teacher's daily wages shall not be less than an amount determined by multiplying $2\frac{1}{4}$ cents by the general average of scholarship and success given the teacher on his highest grade of license at the time of contracting; and after three years of teaching said wages shall not be less than $2\frac{1}{4}$ cents multiplied by the general average of scholarship and success given the teacher on his highest grade of license at the time of contracting: *Provided*, That 2 per cent shall be added to a teacher's general average of scholarship and success for attending the county institute the full number of days, and that said 2 per cent shall be added to the average scholarship of beginning teachers. All teachers now or hereafter exempt from examination shall be paid not less than $2\frac{1}{4}$ cents multiplied by the general average of scholarship and success given said teachers, the grade of scholarship to be that given at the teacher's last examination, and the grade of success that of the teacher's term last preceding the date of contracting. The State superintendent of public instruction is authorized to bring action against any school officer violating any of the provisions of this law, the penalty being a fine not to exceed \$100.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every parent, guardian, or other person in the State having control of any child between 7 and 14 years of age shall send such child to a public, private, or parochial school each year for a term not less than that of the public schools of the school corporation where the child resides: *Provided*, That no child in good mental and physical condition shall for any cause, any rule or law to the contrary, be precluded from attending school when such school is in session.

The county board of education shall appoint one truant officer in each county. When, from personal knowledge or by report or complaint from any resident or teacher, a truant officer believes that any child subject to these provisions is habitually tardy or absent from school, he shall give notice to the parent or guardian that the attendance of such child at school is required; and if within five days such parent or guardian does not comply therewith, then the truant officer shall make complaint against such parent or guardian for violation of the compulsory attendance law, the penalty for which is a fine not to exceed \$25, to which may be added imprisonment from two to ninety days. Only one notice shall be required for any child in any year.

A city having a school enumeration of 5,000 or more children, or two or more cities and towns in any county having a combined school enumeration of 5,000, may, in the discretion of the county board, constitute a separate district for the administration of this law.

Cities containing 10,000 school children or less shall have but one truant officer; from 10,000 to 20,000 school children, two truant officers; 20,000 to 30,000, three; 30,000 to 40,000, four; more than 40,000, five. City truant officers shall be appointed by the board of school trustees or commissioners, as the case may be.

Traunt officers shall receive from the county treasury \$2 for each day of actual service.

Character of instruction.—All schools in a township shall be taught an equal length of time as nearly as the same can be done. The school meeting determines the length of time schools are to be taught. The common schools of the State shall be taught in the English language, and there shall be taught in them orthography, reading, writing, arithmetic, geography, English grammar, physiology, history of the United States, and good behavior, and such other branches and languages as the advancement of the pupils and the county board may require. The trustees may establish graded schools or such modifications of them as they may deem practicable. The board of any incorporated town or city is empowered to establish kindergartens for children 4 to 6 years of age, cost to be defrayed from local funds. All cities having a population of 3,000 or more shall maintain a night school from 7 to 9 p. m. during the regular school term, open to pupils from 14 to 30 years of age employed in business during the day. In cities of 100,000 population manual training schools may be established.

Text-books.—The State board of education shall constitute a board of commissioners for the purpose of making a selection or the compilation for use in the common schools of a series of text-books on the following branches: Spelling, reading, arithmetic, geography, English grammar, physiology, history of the United States, and a graded series of writing books, no book to contain anything of a sectarian character. As soon as the board shall have entered into contract for the furnishing of the books the governor shall announce the fact, and the school trustees of every school corporation within thirty days shall certify to the county superintendent the number required by the schools under their care. The county superintendent makes requisition upon the State superintendent and the latter upon the contractor, who shall, within ninety days, ship the books to the county superintendent, from whom the school trustees shall immediately procure and furnish them to the patrons at the price fixed. It shall be the duty of each township trustee and each school board to furnish the necessary school books to all such indigent children as may desire to attend the schools.

Buildings.—The voters shall annually elect one of their number director, who shall serve without pay. He shall have charge of the school property, under the general concurrence of the trustees (see Organization—Trustees), and shall make all temporary repairs and provide the necessary fuel, and may expei pupils for cause.

When a schoolhouse is unoccupied by a common school of the State and the

people who form the school at such house desire that a private school be taught therein, and a majority of them make application to the trustee having charge of such house for the use of it for a private school, the use shall be granted, provided the house be vacated when desired for a public school and the private school teacher report the number of teachers, of pupils, the average attendance, and the average cost of tuition for each pupil. When a majority of the legal voters of any school district desire the use of the schoolhouse the trustee having charge of the same shall authorize the director to permit such use.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The common school fund shall consist of the surplus revenue fund, the saline fund and the lands belonging thereto, the bank-tax fund, and the fund arising from section 114 of the charter of the State bank of Indiana, the fund arising from fines assessed for breaches of the penal laws of the State and from all forfeitures which may accrue, all lands and other estate which shall escheat to the State for want of heirs, all lands granted to the State without designation of a purpose, the proceeds of the sales of swamp lands granted to the State, and taxes on the property of corporations that may be assessed by the general assembly for common school purposes. The Congressional township school fund shall consist of the fund derived from the sale of Congressional township school lands and the unsold lands belonging thereto. These funds shall never be decreased, but the income shall always be invariably appropriated to the support of common schools.

Taxation.—There shall be assessed annually 11 cents on each \$100 on taxable property, real and personal, in the State, irrespective of color, and 50 cents on each taxable poll, for the purpose of supporting a general system of common schools.

The trustees of the several townships, towns, and cities shall have power to levy a special tax for the construction, renting, or repairing of schoolhouses, for providing furniture, school apparatus, and fuel, and for the payment of other necessary expenses of the school except tuition; but no tax [for such purpose] shall exceed the sum of 50 cents on each \$100 worth of property and \$1 on each poll in any one year, and the amount derived from the tax shall be denominated the special school revenue. The trustees of the several townships, towns, and cities shall have power annually to levy a tax not exceeding 50 cents on each \$100 of taxable property and 25 cents on each taxable poll, which shall constitute a supplementary tuition fund, to extend the terms of school after the tuition funds apportioned by the State to such localities shall have been exhausted. They may also lay a special tax to pay debts, but not to exceed 25 cents on each \$100 in any one year.

IOWA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State board of examiners—County superintendent—County board—School corporations—Subdistrict director—Truant officers.

State superintendent.—A State superintendent of public instruction shall be chosen at the general election in each odd-numbered year. He shall have the general supervision of all the county superintendents and of all the common schools of the State, may meet county superintendents in convention at such points in the State as he may deem most suitable, and by explanation and discussion secure a uniform and efficient administration of the school laws. He shall attend teachers' institutes in the several counties as far as possible, and assist, by lectures or otherwise, in their instruction and management. He shall have power to publish and distribute courses of study for use in the rural and high schools of the State; questions for the use of county superintendents in the examination of teachers for certificates; leaflets relating to Arbor Day, Memorial Day, and such other days considered by him worthy of special observance, and statistical and other information concerning the public schools and education in general. He shall render a written opinion to any school officer

asking it touching the exposition or administration of the school law, and determine all cases appealed from the decision of county superintendents. He shall have an office at the seat of government, in which he shall file all papers, reports, and public documents transmitted to him by the county superintendents each year separately, and shall exhibit them when required by the governor or the legislature, and shall keep a fair record of all matters pertaining to his office. Every four years he may cause the school laws to be printed, with such notes, rulings, forms, and decisions as may seem of value to aid school officers in the proper discharge of their duties, appropriate reference being made to previous laws amended or changed so as clearly to indicate the effect of amendments or changes. He shall send to each county superintendent a number of copies bound in cloth sufficient to supply each school corporation in his county, and a sufficient number bound in paper to furnish to the members of the boards of directors one copy, which shall be turned over by each to his successor in office. He may subscribe for a sufficient number of copies of an educational journal, as he may elect, if published in the State, to furnish one copy to each county superintendent, provided the journal selected shall contain his decisions concerning the school law. He shall, on the 1st day of January of each year, report to the auditor of the State the number of persons in each county between the ages of 5 and 21, and shall biennially make to the governor a report embracing a statement of the condition of the common schools of the State, the number of school townships and districts therein, the number of teachers, of schools, of schoolhouses and their value, of persons 5 to 21 years of age, the number of scholars in each county that have attended school the previous year as returned by the county superintendent, the number of books in the district libraries, the value of all apparatus in the schools, and such other statistical information as he may deem important, and such plans as he may have matured for the more perfect organization and efficiency of common schools. Four thousand five hundred copies of this report shall be issued. He shall appoint the time and place for holding teachers' institutes, and shall be president of the board of trustees of the State normal school and of the State board of examiners, a member of the board of regents of the State university, and of the board of trustees of the Iowa State College of Agriculture and the Mechanic Arts.

State board of examiners.—The superintendent of public instruction; the president of the State university, the principal of the State normal school, and two persons appointed by the governor, one of whom shall be a woman, for a term of four years, shall form a State board of examiners. No member appointed by the governor shall succeed himself. The board shall meet at such times and places as its president shall direct, and shall annually hold at least two public examinations of teachers, at each of which one member of the board or its secretary shall preside, assisted by one or two teachers, as the board shall determine. The board may adopt rules not inconsistent with law, and shall keep a full record of their proceedings and a record of all persons to whom certificates and diplomas are issued. Each member of the board shall receive pay for his expenses, and those appointed \$3 per diem for time actually engaged.

County superintendent.—In every odd-numbered year there shall be elected a county superintendent. No person shall be deemed ineligible by reason of sex to this or any other school office in the State of Iowa, but the county superintendent shall not be a school director or a member of the board of supervisors during the time of his incumbency.

On the last Friday and Saturday of each month the county superintendent shall meet all persons desirous of passing an examination, and for the transaction of other business within his jurisdiction, in some suitable room provided for that purpose by the board of supervisors at the county seat, at which time he shall examine all applicants for teachers' positions, and shall give certificates to those found competent. He shall hold annually a normal institute for the instruction of teachers and those desiring to teach, and may revoke a county certificate for cause after defense. All disbursements of the institute fund shall be upon the order of the county superintendent. He shall annually make a report to the State superintendent containing an abstract of the reports made to him by the district secretaries and such other matters as he or the State superintendent may deem important, and he (the county superintendent) shall also report to the county auditor the number of persons between 5 and 21 years of age in each school district of his county, upon failure to make either of which reports he shall forfeit \$50 and be liable for any damage caused by such neglect. He shall also report the number of blind, deaf and dumb, and feeble-minded to the superintendents of the respective institutions for such persons. He shall

serve as the medium of communication between the State superintendent and the officers of school corporations, and may at his own discretion visit the several schools in his county and, at the request of a majority of the directors of a district, shall visit the school in said district at least once each term.

The compensation of the county superintendent shall be \$1,250 per annum, with such additional compensation as the board of supervisors may deem just and proper, besides necessary stationery and postage for use of his office. If necessary, he may appoint a deputy, who may perform all his official duties except visiting schools and trying appeals.

County board of education.—(See Schools—Text-books.)

School corporations.—School corporations shall be known as school townships (city, town, or village independent districts) and rural independent districts. The board of a school township is composed of one director from each sub-district, chosen for a term of one year; that of a city, town, or village district, five to seven members, for three years; that of a rural independent district, three members, for three years. Vacancies may be filled by the board.

The board shall hold two regular meetings annually, and special meetings on call of the president; shall make all contracts, purchases, payments, and sales necessary to carry out any vote of the corporation, but before constructing any schoolhouse shall consult the county superintendent as to the most approved plan for such building; shall fix the site for each schoolhouse, taking into consideration the geographical position and convenience of each portion of the district; determine what number of schools shall be taught beyond the time required by law, and for what period; determine where pupils may attend school, and for this purpose may divide the district into wards or other divisions, such as they may deem necessary. They shall have power to rent a room and employ a teacher for any 10 pupils; and under certain conditions they may transport pupils to school in another corporation, paying cost of tuition from the teachers' fund and transportation from the contingent fund. They may establish graded or union or high schools wherever necessary and may select a person who shall have general supervision of all schools in the district, subject to the rules and regulations of the board. The board of an independent district may establish kindergarten departments, to be paid for in the same manner as other departments. The board is authorized to adopt text-books, contract for and buy said books and other supplies, and sell same to pupils at cost. They shall cause twelve or more shade trees to be planted on each schoolhouse site not having that number already upon it, the expense to come out of the contingent fund, and may use unappropriated money from that fund to insure school property.

Subdirectors.—Subject to the county board of education, the subdirector shall negotiate in his district all necessary contracts for fuel, repairing and furnishing schoolhouses, and shall make all other provisions necessary for the convenience and prosperity of the schools within his subdistrict. He shall have control of the schoolhouse, unless otherwise ordered by a vote of the school township meeting. But all contracts shall be approved and signed by the president of and reported to the board, which shall be responsible. The subdirector shall prepare a list of names of the heads of families within his subdistrict, together with the number of children (by sex) from 5 to 21 years of age, which latter shall be reported to the secretary of the township board. He shall also report to said secretary the names of all children 7 to 14 years of age, and the reasons why any of such may not attend school for twelve consecutive school weeks. (See also Schools—Attendance.)

Truant officers.—(See Schools—Attendance.)

2. TEACHERS.

Contracts—Certificates—School registers—Preliminary training—Institutes.

Contracts.—No person shall be employed to teach a common school supported by the public funds unless he have a certificate of qualification signed by the county superintendent or other authorized person, and anyone teaching without such a certificate shall have no valid claim to compensation for such service. All contracts with teachers shall be in writing, specifying the number of weeks the school is to be taught, compensation, and such other matters as may be agreed upon, shall be signed by the president of the board of directors and the teacher, and be filed with the secretary of the board before the teacher begins to teach. A teacher may be discharged by a majority vote of the board for in-

competency, inattention to duty, partiality, or other good cause, after an opportunity for defense.

Certificates.—Candidates for State certificates shall be examined in orthography, reading, writing, arithmetic, geography, English grammar, bookkeeping, physiology, history of the United States, algebra, botany, natural philosophy, drawing, civil government, constitution and laws of Iowa, vocal music, and didactics; and candidates for State diplomas shall, in addition thereto, pass in geometry, trigonometry, chemistry, zoology, geology, astronomy, political economy, rhetoric, English literature, general history, and such other branches as the board of examiners may require. A State certificate shall authorize a person to teach in any public school in the State for five years, and a State diploma, for life; but both are revocable by the board of examiners for cause, after the holder has had an opportunity to make defense. The examination fee for a State certificate is \$3 and for a State diploma \$5, one-half of which shall be returned should the applicant fail to pass.

On the last Friday and Saturday in each month the county superintendent shall examine applicants for county certificates in the following-named subjects: Orthography, reading, writing, arithmetic, geography, English grammar, physiology, didactics, vocal music, and history of the United States. If the examination is satisfactory, and the superintendent is satisfied that the applicant possesses a good moral character and the essential qualifications for governing and instructing youth, he shall give him a certificate to that effect for not longer than one year. If an applicant desires a certificate for two years, he shall also pass examination in elementary civics, algebra, physics, and economics, and present proof of thirty-six weeks' successful experience in teaching. Persons desiring to teach only music, drawing, penmanship, bookkeeping, German, or other language shall not be required to stand examination on other than their specialty, nor shall they be permitted to teach branches upon which they have not been examined. Any school officer or other person may be present at the examination, and the superintendent shall make a record of the name, residence, and age of all persons examined, showing who pass and who fail. County certificates are revocable for cause after an opportunity for defense.

School registers.—The teacher shall keep a correct daily register of the school, showing the name, age, and attendance of each pupil and the branches studied. When pupils reside in different districts a register shall be kept for each district. The teacher shall, after the close of the school, immediately file in the office of the secretary of the board a certified copy of the register.

Preliminary training.—A school for the special instruction and training of teachers for the common schools of this State is established at Cedar Falls, under the management and control of a board of six trustees, no two of whom shall be from the same county, with the State superintendent as ex officio president of the board. The six members are elected by the legislature for terms of six years, two to retire biennially; vacancies filled by the governor. No trustee shall be a teacher in the school. They shall receive \$4 per diem for time employed and actual expenses. They shall employ competent teachers, control all State property for use of the school, direct expenditures, and make rules and regulations for the government of and admission to the school. Pupils shall be required to sign a declaration of their intention to follow the business of teaching in the schools of the State. The board shall make all possible and necessary arrangements with means at their disposal for boarding and lodging pupils, but pupils shall pay cost of the same and a contingent fee not to exceed \$1 a month and may be charged \$6 a term for tuition, if the same be necessary, to support the school. The board shall make a detailed report to the governor biennially, showing the number of teachers employed, their compensation, number of pupils classified, an itemized statement of receipts and expenditures, and such other information as they may deem expedient, with recommendations.

The State board of educational examiners shall constitute a board for the examination, recognition, and supervision of other schools designed for the instruction and training of teachers. All such schools that shall meet the requirements of this board shall be known as accredited schools, the graduates of which who shall pass an examination in the branches required for a two years' county certificate shall receive from the State board a certificate valid for two years, which may be renewed under such rules as the board may prescribe.

Institutes.—Whenever reasonable assurance shall be given by the county superintendent to the State superintendent that not less than 20 teachers desire to assemble for the purpose of holding a teachers' institute, to remain in session

for not less than six working days, he shall appoint the time and place of said meeting and give due notice to the county superintendent, and for the purpose of defraying the expenses of said institute \$50 shall be appropriated annually from any moneys in the State treasury for one such institute in each county, to be expended by the county superintendent.

The county superintendent shall hold annually a normal institute for the instruction of teachers and of those who may desire to teach, and, with the concurrence of the superintendent of public instruction, procure such assistance as may be necessary to conduct the same, at such times as the schools in the county are generally closed. To defray the expenses of said institute he shall require the payment of a registration fee of \$1 from each person attending, and shall also require the payment in all cases of \$1 from every applicant for a certificate, which he shall transmit to the county treasurer, to form, with the State appropriation, the institute fund. The board of supervisors may appropriate such additional sum as may be necessary for the further support of the institute. During the time of holding a teachers' institute in any county any school that may be in session shall be closed, and all teachers and persons desiring a teacher's certificate are expected to attend.

3. SCHOOLS.

Attendance—Course of study—Text-books—Buildings.

Attendance.—In each school corporation there shall be taught one or more schools for the instruction of youth from 5 to 21 years of age for at least twenty-four weeks of five school days each year, unless the county superintendent shall for good cause consent to a shorter time. Any person who was in the military service of the United States during his minority may be admitted on same terms as youth 5 to 21 years. The board may by a majority vote expel any pupil from school for immorality, or for violation of regulations established by the board, or when the presence of such pupil is detrimental to the best interests of the school.

Any person having control of any child 7 to 14 years of age, in proper physical and mental condition to attend school, shall cause such child to attend some public, private, or parochial school, where the common school branches of reading, writing, spelling, arithmetic, grammar, geography, physiology, and United States history are taught, or to attend upon equivalent instruction by a competent teacher elsewhere than in school, for at least twelve consecutive school weeks in each school year. A child may be excused for sufficient reasons by any court of record or judge thereof. Any person violating this law may be fined from \$3 to \$20 for each offense. The secretary of a school corporation may require the principal of any private or parochial school to make a report once a year concerning all the pupils in attendance, and of individual pupils at any time it may be considered necessary. And any person having control of a child who is under private instruction must furnish a report when called for by the secretary.

The board may establish truant schools, or set apart separate rooms for such purpose, may appoint truant officers; and when a child becomes habitually vagrant, disorderly, or incorrigible, may commit him to one of the State industrial schools provided for that purpose. It is the duty of the directors and truant officers appointed by the board to see to the enforcement of the law, who, failing to do so, may be fined from \$10 to \$20 for each offense, after receiving a written notice from any citizen of the district. All teachers of public schools, county superintendents, and school officers and employees shall promptly report violations to the secretary, who shall notify the president, and he shall, if necessary, lay the matter before the board. The board may provide reasonable punishment for habitual truants or those who frequent or loiter about public places during school hours without lawful occupation. The school census shall include a report of all children from 7 to 14 years of age, the number who do not attend school, and the cause of such failure to attend.

Transportation of pupils.—(See Organization—School corporations; Finances—Taxation.)

Course of study.—The electors at the annual meeting shall have power to determine what branches additional to those adopted by the board shall be taught in the schools of the district, and may direct that German or other language may be taught in one or more of the schools to pupils whose parents or guardians so desire, provided that all other branches shall be taught in the English language. The Bible shall not be excluded from any school or insti-

tution, but no pupil shall be required to read it contrary to the wishes of his parent or guardian.

Text-books.—The board of directors of each school corporation are authorized to adopt text-books for all branches authorized to be taught in the public schools, and to contract for and buy such books and other necessary supplies out of the contingent fund and sell same to pupils of their district at cost, the money received therefor to be returned to said contingent fund. The said board shall annually certify to the board of supervisors the additional amount necessary to be levied for the contingent fund, not to exceed \$1.50 in any year for each pupil residing within the corporation; but the board shall not contract any debt for such purpose. In the purchase of text-books it shall be the duty of the board of directors or the county board of education to take into consideration the books then in use in the respective districts, and they may buy such additional number of text-books as may from time to time become necessary to supply their schools, and they may arrange on equitable terms for exchange of books in use for new books adopted. If at any time the publishers of such books as have been adopted shall neglect or refuse to furnish them at the lowest price furnished any district or State board, then the board of directors or county board of education shall bring suit upon the publishers' bond. Before purchasing text-books under the provisions of this act the board of directors or county board of education shall advertise, by publishing a notice for three consecutive weeks in one or more newspapers published in the county, stating the time up to which bids shall be received, the classes and grades for which text-books and other necessary supplies are to be bought, and the approximate quantity needed; and the board shall award the contract for the text-books and supplies to any responsible bidder or bidders offering suitable text-books and supplies at the lowest prices, taking into consideration the quality of material used, illustrations, binding, and all other things that go to make up a desirable text-book, and may, to the end that they may be fully advised, consult the county superintendent, or, in the case of town or city independent districts, with city superintendent or other competent persons, with reference to the selection of text-books. It shall be unlawful for any board of directors or county board of education to change within five years, except as provided for above, any text-book that has been regularly introduced, unless authorized to do so by a majority of the electors present and voting at the regular annual meeting, due notice having been given.

Any person desiring to furnish books or supplies to the county shall deposit in the office of the county superintendent samples of all text-books included in his bid, accompanied with lists giving lowest wholesale and contract prices; and every successful bidder shall enter into sufficient bond for the faithful performance of his contract.

When a petition signed by one-third of the school directors in a county shall be filed in the office of the county superintendent at least thirty days before the annual school election in March asking for uniformity of text-books in the county, the county superintendent shall notify the county auditor and board of supervisors in writing, and the county board of education (composed of the auditor, superintendent, and supervisors) shall convene and arrange for a vote upon the question by the electors. Should a majority of the electors voting at said election favor a uniform series of text-books for use in the county, the county board shall select the text-books for the entire county outside of cities and towns and contract for the same, and the public schools shall use the books so selected. The board may arrange for depositories and may pay for the books from county funds and sell them to districts at same price, proceeds to be returned to the county funds by the county board monthly. Cities and towns may vote to adopt and buy books at prices fixed by county board.

Whenever a petition signed by one-third of the legal voters of a corporation asks for a vote on free text-books, the question shall be submitted at the next annual meeting. If the proposition carries, the board shall procure such books as shall be needed, in the manner provided by law for the purchase of text-books, and shall loan them to pupils free of expense. The electors may direct the board to discontinue supplying free books.

Buildings.—School buildings and their appurtenances, their construction, and the purchase of sites are under the control of the board of the school corporation. All schoolhouses erected or repaired at a cost exceeding \$300 shall be by contract after advertisement in a newspaper published in the county, or one published nearest its boundaries if there be none published in the county. (See also Organization—School corporations; subdirectors.)

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The educational and school funds and lands shall be under the control and management of the general assembly of this State, and the money subject to the support and maintenance of common schools shall be distributed to the districts in proportion to the number of youths between the ages of 5 and 21 years in such manner as may be provided by the general assembly.

The university lands and the proceeds thereof, and all moneys belonging to said fund, shall be a permanent fund, for the sole use of the State University. The interest arising from the same shall be annually appropriated for the support and benefit of said university. The general assembly shall take measures for the protection, improvement, or other disposition of such lands as have been or may hereafter be reserved or granted by the United States or any person or persons to this State for the use of the university, and the funds accruing from the rents or sale of such lands or from any other source for the purpose aforesaid shall be and remain a permanent fund, the interest of which shall be applied to the support of the university, for the promotion of literature, the arts, and sciences, as may be authorized by the terms of such grant. And it shall be the duty of the general assembly to provide effectual means for the improvement and permanent security of the funds of said university.

The proceeds of all lands that have been granted by the United States for the support of schools which shall hereafter (1857) be sold or disposed of, and the 500,000 acres of land granted to the new States under an act of Congress distributing the proceeds of the public lands among the several States of the Union, approved in the year of our Lord 1841, and all estates of persons who may have died without leaving a will or heir, and also such per cent as may have been granted by Congress on the sale of lands in this State, shall be and remain a perpetual fund, the interest of which, together with all rents of the unsold lands and such other means as the general assembly may provide, shall be inviolably appropriated to the support of common schools throughout the State.

The money which may have been or shall be paid by persons as an equivalent for exemption from military duty, and the clear proceeds of all fines collected in the several counties for any breach of the penal laws, shall be exclusively applied, in the several counties in which such money is collected, among the several school districts of said counties in proportion to the number of youths subject to enumeration in such districts to the support of the common schools.

The financial agents of school funds shall be the same that by law receive and control the State and county revenue for other civil purposes, under such regulations as may be provided by law.

Taxation.—The board of directors shall, at their regular meeting in March, or at a special meeting for the purpose before the first Monday in May, estimate the amount required for the contingent fund, not to exceed \$5 a pupil (except where pupils are transported to other districts, when \$5 additional for each pupil may be levied), and also such sum as may be required for the teachers' fund in addition to the amount received from the semiannual apportionment of the income of the State fund, together not to exceed \$15 a pupil residing in the district; and shall cause the secretary to certify the same, together with the amount voted for schoolhouse purposes, not to exceed 10 mills on the dollar, within five days thereafter to the board of supervisors, who shall levy the per centum upon the property of the school corporation, which shall be collected and paid over as are other district taxes; and they shall apportion any tax voted by the school township meeting for a schoolhouse fund among the several subdistricts in a just and equitable manner, taking as the basis of such apportionment the respective amounts previously levied upon the subdistricts; but if the electors of a subdistrict have increased the sum for schoolhouses above that voted by the school township at its meeting, the county supervisors shall levy such excess on the subdistrict asking it, provided that not more than 15 mills on the dollar shall be levied on the taxable property of any subdistrict during any year for schoolhouse purposes. The board of supervisors shall also at the same time levy a tax for the support of schools within the county of not less than 1 nor more than 3 mills on the dollar on all property in the county, receivable only in cash.

KANSAS.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State school fund commission—State superintendent—County superintendent—County high school trustees—County board of examiners—District board of directors—Truant officers—City board of education.

State board of education.—(See Teachers—Appointment, qualifications, and duties.)

State school fund commissioners.—(See Finances—Funds.)

State superintendent.—There shall be elected biennially a State superintendent of public instruction, who shall execute at the time of taking the oath of office a bond in the sum of \$10,000, with two or more sureties, conditioned on his faithfully performing the duties of his office. The educational interests of the State shall be under his supervision and management, subject to such limitations as are prescribed by law. He may appoint an assistant superintendent of public instruction, who shall perform such duties, not inconsistent with law, as his principal may prescribe. He may also appoint a clerk, who shall also act as clerk of the board of commissioners for the management and investment of the school funds. The State superintendent shall distribute the income of the State school fund and the annual taxes collected by the State for the support of the common schools to the counties reporting to him in a proper manner. Upon a written statement of the facts submitted by county superintendent or by board of education, he shall give an opinion on all questions regarding the rights, powers, and duties of school district boards, school officers, and county superintendents, advising with the attorney-general, if he deem it necessary. He shall publish the school laws not oftener than once in two years, and therewith such other forms, regulations, etc., as he may deem expedient. He shall prepare all forms and blanks necessary in the details of the common school system, so as to secure its uniform operation, and cause them to be forwarded to the county superintendents. He shall visit the schools of each county at least once in two years, shall recommend the most approved text-books, and open such correspondence as may enable him to obtain all necessary information relating to the system of common schools in other States. He shall have an office at the capitol, where he shall keep the records of his office and such school material or books as he may receive by virtue of his position. He shall make a report biennially, on the 1st day of December preceding each regular session of the legislature, to the governor, in which he shall give (1) a statement of the number of common schools in the State, the number of scholars attending the same, by sex, and the branches taught; the number of normal schools in the State and the number of students attending them; the number of academies and colleges in the State and the number of students and their sex, and such other matters as he may deem expedient, drawn from the reports of the county superintendents or other local school officers; (2) a statement of the condition of the common school fund of the State for the support of common schools, and giving a full statement of the school land account of each county; (3) a statement of the receipts and expenditures for the year; (4) a statement of plans for the management and improvement of common schools, and such other information relating to the educational interests of the State as he may deem important.

The county superintendent.—A superintendent of public instruction shall be elected in each county biennially, who shall, when sworn in, give bond in the sum of \$1,000, conditioned on the faithful discharge of his duties. It shall be his duty to visit each school in his county at least once during each year (subject to fine of \$5 for each school not visited), correct any deficiency that may exist in the government of the school, the classification of the pupils, or the methods of instruction in the several branches taught, and make such suggestions in private to the teachers as he may deem proper and necessary to the welfare of the school; note the character and condition of the schoolhouse, furniture, apparatus, and grounds, and report in writing to the district board, suggesting improvements; examine the record books and accounts of district officers; encourage the formation of teachers' associations and to attend their meetings; attend the normal held in his county and inspect its daily work and assist therein; hold a public meeting in each school district of his county at least once every year for the purpose of discussing school questions and elevating the standard of education; keep his office open Saturday of each week, and when receiving

more than \$600, every day when not absent attending to his official duties; keep and preserve a record of his official acts, of the teachers employed, and of candidates for employment in his county; apportion the State school fund within five days, together with the unapportioned county school fund, among the school districts and parts of districts in the county, according to the population of school age, but no district in which a common school has not been taught at least three months the last preceding school year shall be entitled to receive any portion of either the State or county fund; furnish the county clerk with a description of the boundary of each school district. He shall make out and transmit in writing to the State superintendent a report containing the following particulars: Number of school districts or parts of districts in each county, number of children (by sex) resident in each county over 5 and under 21 years, number of district schools in the county, length of time school has been taught in each, number of pupils attending the same (by sex), branches taught, and text-books used, number of teachers employed in same (by sex); number of private or select schools in the county as far as ascertainable, number of teachers employed in same (by sex) and branches taught; number of graded schools in the county, duration of school, attendance (by sex), branches taught, and the number and sex of teachers employed in same; condition of the normal school, if any, attendance (by sex), number and sex of teachers employed in same, and the same particulars for the normal institute; amount of public money received in each district or part of district, and what portion of same, if any, has been appropriated to the support of graded schools; amount of money raised in each district by tax and paid for teachers' wages in addition to public money paid therefor; amount of money raised by tax or otherwise for the purpose of purchasing school sites, for building, hiring, purchasing, repairing, furnishing, or insuring such schoolhouse, or for any other purpose allowed by law, in each district or part of district.

The annual compensation of the county superintendent shall be as follows: In counties of 1,000 to 1,200 persons of school age, \$600; 1,200 to 1,500, \$700; more than 1,500, \$700 and \$20 for each additional 100. In counties having a school population of less than 1,000 the superintendent shall receive for every day actually and necessarily employed in the discharge of his duties the sum of \$3 per diem, for a number of days not to exceed 150 in any one year. But no county superintendent shall receive more than \$1,200, and in determining the salaries of county superintendents the school population of cities of the first and second class shall not be included.

The county superintendent shall fill vacancies occurring in the board of directors of any school district. In case of his death, resignation, or removal his successor shall be appointed by the board of county commissioners. He shall divide the county into a convenient number of school districts, which he shall be at liberty to change or abolish when public interest requires it, but no new school district shall be formed containing fewer than 15 persons of school age, and none having a bonded indebtedness shall be so reduced that such indebtedness shall exceed 5 per cent of its assessed property valuation. He shall purchase record books for district officers.

County high school trustees.—(See Schools—Character of instruction.)

County board of examiners.—(See Teachers—Appointment, qualifications, and duties.)

District board.—An annual meeting of each school district shall be held on the third Thursday in June of each year, at the schoolhouse belonging to the district, at 2 p. m. The powers of a district meeting shall be to choose a director, clerk, and treasurer, who shall have the qualifications of voters; to designate a site for a district schoolhouse; to vote a tax annually, not to exceed 2 per cent on the taxable property of the district, and distribute the amount between the payment of teachers and in purchasing or leasing a site; to determine the length of time a school shall be taught (not less than three months), and whether the school money to which the district may be entitled shall be applied to the support of the summer or winter term or a certain portion to each.

The officers of each school district shall be a director, clerk, and treasurer, who shall constitute the district board, one member retiring annually after a term of three years. The director shall preside at all meetings, sign all orders drawn by the clerk for district money, and represent the district in all legal proceedings. The clerk of the district board, in addition to the usual perfunctory

duties of his office, shall make a written report, which he shall submit and read to the legal voters of the district at the annual meeting, which shall be forwarded to the county superintendent. The report shall contain the following matters: Number of children (by sex) 5 to 21 years of age, name and residence of each, date of birth, parents' name, affidavits that enumeration of each family has been sworn to by parent or guardian, number attending school (by sex), and branches studied; length of time a school has been taught by a qualified teacher, name of the teacher or teachers, length of service of and wages paid each teacher; amount of money received from the county treasurer, amount arising from disbursement of the State annual school fund, from district taxes, and from all other sources during the year, and the manner in which the same has been expended; the amount raised by the district each year, and the purposes for which it was raised; the kind of books used in the schools, and such other facts and statistics in regard to the district school as the county superintendent may require. Every school district clerk or treasurer who shall neglect or refuse to deliver to his successor in office all records, books, and papers belonging to his office shall be fined not more than \$50. The district board shall purchase or lease such site for a schoolhouse as shall have been designated, shall have the care and keeping of the same and of the other school property belonging to the district, shall have power to make such rules and regulations relating to the district library as they may deem proper, and to appoint some suitable person to act as librarian and to take charge of the school apparatus belonging to the district. The board shall contract with and hire qualified teachers for and in the name of the district, which contract shall be in writing and shall specify the wages per week or month, as agreed upon by the parties, and, in conjunction with the county superintendent, may dismiss for incompetency, cruelty, negligence, or immorality. They may suspend pupils for cause, but the suspended person may appeal to the county superintendent. The board shall either severally or jointly visit all the schools of their district at least once a term, making a thorough investigation into the character and results of instruction, and into the condition of the buildings and appliances, and shall make suggestions for the improvement of the same.

Truant officers.—(See Schools—Attendance.)

Boards of education of cities.—In all cities of more than 15,000 inhabitants and having not more than 4 wards there shall be a board of education consisting of 3 members from each ward, who shall be and remain residents of the wards from which they are elected during their term of office, to be elected by the qualified voters of the city at large for terms of three years, 1 to retire annually. In cities of 15,000 having more than 4 wards the board of education shall consist of 2 members from each ward, each to hold office for two years. In cities of 35,000 or more inhabitants the board of education shall consist of 6 members, 1 from each ward. The board shall make all necessary rules and regulations for the government of the schools, exercise sole control over the public schools and school property, and shall have power to establish a high school, examine teachers, and appoint a superintendent.

All cities organized as cities of the second class, and all cities attaining a population of from 2,000 to 15,000, shall maintain a system of free common schools. At each annual city election there shall be a board of education, consisting of 2 members from each ward, elected by the qualified voters thereof, each for a term of two years. The powers of the board of cities of the second class are, in general, those of cities of the first class.

Cities of 250 to 2,000 (third class), if not otherwise governed, shall be subject to the provisions laid down for district schools.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—The district board in each district shall contract with and hire qualified teachers, and shall, in the written contract, specify the wages per week or month as agreed upon by the parties. No person shall be elected teacher who can not produce a certificate from the examining committee or the State board setting forth that the holder is competent to teach in a specified department of the public schools and is of good moral character. The county board shall publicly examine all persons proposing to teach in the common schools of the county as to their competency to teach the branches prescribed by law.

There shall be a State board of education, consisting of the State superintendent, the chancellor of the State university, the president of the State agricultural college, the president of the State normal school, and 3 others to be appointed with the concurrence of the senate, selected from among those engaged in school work in the schools of the State, who shall have office for two years. The board is authorized to issue State diplomas to such professional teachers as may be found upon critical examination to possess the requisite scholarship and culture and produce satisfactory evidence of unexceptionable moral character, eminent professional experience and ability, and have taught for two years in the State. All such diplomas shall be countersigned by the State superintendent and are valid anywhere. The actual expenses of the members of the board, and of holding such examinations as it may appoint, shall be paid from the State treasury; but the sum total shall not exceed \$300 per annum. Upon the application of any institution of higher education in Kansas, the State board shall examine its course of study, and, if it appear to be as efficient as the four year courses of study in the State normal school, the marking of such institution on academic subjects completed shall be adopted by the board as the standing of candidates coming before it on the subjects specified; but the candidate shall be examined upon the professional subjects of the normal-school course, to wit: Philosophy of education, history of education, school laws, methods of teaching, school management, and upon other required subjects; and to those successfully filling all requirements a three year certificate shall be issued, and if, at the expiration of that time, the holder satisfies the board that he has taught successfully at least two years and has kept himself well informed in the general literature of his profession, a life^e certificate shall be granted. The State certificates of other States shall be recognized if testifying to a grade of scholarship equal to that required by the State board of Kansas. All life certificates are void if the holder shall not engage in school work for three consecutive years, but may be renewed to graduates of the State university and of other colleges maintaining an equivalent arts course and course in education, approved by the State board of education. The State board may issue a three-year renewable State certificate, subject to limits of the above-mentioned certificates.

In each county there shall be a board of county examiners, composed of the county superintendent, who shall be chairman of the board, and two competent persons, holders of first-grade or State certificates, or of diplomas from the State university, State normal school, or State agricultural college, who shall be appointed by the county commissioners on the nomination of the county superintendent, and shall serve for one year and receive \$3 per diem for not more than twenty-four days in any one year. The board shall, on the last Saturday of January and October, and at the close of the county normal institute, only at such places as may be designated by the chairman, after ten days' notice, publicly examine all persons proposing to teach in the common schools of the county (cities of the first and second class excepted) as to their competency to teach the branches prescribed by law, and such board of examiners shall issue certificates to all applicants who shall pass the required examination and satisfy the board as to their good moral character and ability to teach and govern schools.

The State board shall prepare a series of questions for each examination, to be used in each county, which shall be printed and forwarded to the county superintendents so as to reach them at least two days before the examination in each county, respectively, but shall not be opened except by the board on the day and hour of examination.

Certificates issued by county boards are of four grades: Professional, first, second, and third grades, which shall continue in force one, three, two, and one years, respectively. Professional certificates shall certify that the holder is of good moral character and is fully qualified to teach orthography, reading, writing, English grammar, geography, arithmetic, history of Kansas, history and Constitution of the United States, bookkeeping, physiology and hygiene, theory and practice of teaching, elements of natural philosophy, algebra, English literature, and general history, and shall not be issued to persons under 21 years of age or who have not taught successfully thirty-two school months, or who fall below 90 per cent on a general average in the examination or 85 per cent on any subject. Any person who shall receive 90 per cent or higher on any branch at any regular examination may have such grade credited to him (not beyond two years) on a professional certificate if his general average does not fall below 75 per cent. Professional certificates are renewable

without examination upon payment of \$1 fee, unless applicant shall have discontinued teaching for a period longer than two years, if he was a regular member and attended at least 90 per cent of the time of the county institute preceding issuance of said certificate, was a member and attended meetings of the county association, is a subscriber to some standard educational journal, and shall perform such other professional work as the State or county superintendent may direct.

Certificates of the first grade may be issued to persons not less than 19 years of age who have taught successfully twelve school months, and who shall satisfy the board of their ability to teach all the branches prescribed for a professional certificate except general history and natural philosophy. Their general average on examination shall not be less than 90 per cent and not below 75 per cent in any branch.

For certificates of the second grade persons shall be not less than 18 years of age, shall have taught successfully at least three school months, and shall satisfy the board as to their ability to teach all the branches prescribed for first-grade certificates except bookkeeping and literature. They shall make a general average of 80 per cent, and not less than 60 per cent in any branch.

Third-grade certificates may be issued to persons not less than 18 years of age who shall satisfy the board as to their ability to teach all the branches prescribed for second-grade certificates except algebra, and who shall make a general average not less than 75 per cent, and in no branch less than 60 per cent.

Preliminary training.—When anyone has attended the State normal school twenty-two weeks, if it appear upon examination that he possess the learning and other qualifications necessary to teach a common school, he shall receive a certificate to that effect from the principal, to be approved by the superintendent of public instruction; and when anyone shall have completed the full course in said normal school, he shall receive a diploma, which shall serve as a legal certificate of qualification to teach in the common schools throughout the State.

Institutes.—County superintendents shall hold for not less than four weeks annually in their respective counties a normal institute for the instruction of teachers and those desiring to teach, but in sparsely settled portions of the State two or more counties may unite in holding one institute. The county superintendent shall select the time and place for holding such institutes, as well as a conductor and instructor for the same, each of whom shall hold a certificate from the State board as to his special qualifications therefor. To defray the expenses of the institute each candidate for a teacher's certificate shall be required to pay \$1, and each person attending shall pay \$1 for registration. The county commissioners may make a further appropriation, not to exceed \$100, and when 35 members shall have registered and paid their registration fee the State superintendent shall certify the fact to the State auditor, who shall draw on the State treasurer for \$50 in favor of such institute.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every parent, guardian, or other person in the State of Kansas having control of any child between the ages of 8 and 15 shall be required to send such child to a public school, or to a private school taught by a competent instructor, for such period each school year as said school is in session; but any child 14 or older who is able to read and write English and who is actively and regularly employed for the support of himself or those dependent upon him shall not be required to attend school longer than eight consecutive weeks. Children that have received a certificate of graduation from any county common school or a certificate of admission into any city high school shall be exempt from this law; also children physically or mentally incapacitated for the work of the common schools, but school authorities shall have the right to have such children examined by a physician when exemption is claimed hereunder.

County superintendents shall divide their counties into from one to five truant districts, and the county commissioners shall, upon nomination of the county superintendent, appoint a truant officer for each district, who shall hold office at the will of the county superintendent and shall receive \$2 a day while actually employed. When any truant officer believes from personal knowledge or from information that any child is violating the provisions of this law, he shall immediately give written notice to the parent or other per-

son having control of such child; and if within five days the requirements of law are not met, the truant officer shall make complaint in the name of the State of Kansas against such parent or other person, who, upon conviction, shall be fined not less than \$5 nor more than \$25, to be paid into the county treasury for the benefit of the common schools. In case any pupil becomes a habitual truant, or becomes a menace to the best interests of the school which he is attending, the truant officer shall report such facts to the parent or guardian, who shall be held liable for the regular attendance and good conduct of said child, unless such parent or guardian shall state in writing that said child is beyond his control, whereupon the truant officer shall proceed under the law governing juvenile disorderly persons.

Cities of the first and second class shall constitute each a separate district for the administration of this law, but there shall be but one truant officer (appointed by the board of education) for each 10,000 children or fraction thereof and no city shall have more than five truant officers.

Every teacher is required, before receiving each month's salary, to make a report to his county or city superintendent, showing names and addresses of children who have been truant or habitually absent during the previous month and stating reasons therefor in each case if known; and all such cases shall be brought to the attention of the proper truant officer by such superintendent. In taking the annual school census, enumerators shall record the name and place and date of birth of every child enumerated, and the parent or guardian shall make oath that such record is true.

In every school district wherein there is a good school building a school shall be maintained at least four months each year, between October 1 and June 1; and [according to the State constitution] no district in which a common school has not been taught at least three months each year shall be entitled to receive any portion of the State school fund.

Character of instruction.—In every school district there shall be taught orthography, reading, writing, English grammar, geography, arithmetic, United States and Kansas history, physiology and hygiene with special reference to the effects of alcoholic drinks and narcotics, and such other branches as may be determined by the district board. The instruction in the several branches shall be in the English language.

Any county may establish a high school by a majority vote, and the principal of same shall, with the approval of the board of high school trustees, make such rules and regulations as he may deem proper in regard to the studies, conduct, and government of the pupils under his charge. City boards of education may establish high schools.

Text-books.—The State text-book commission shall consist of the State superintendent as chairman ex officio and eight members to be appointed by the governor and confirmed by the senate for terms of four years, who shall receive \$5 per day of actual service (unless already receiving some stated salary from State, county, or city) and actual expenses going and coming. Said commission shall select and adopt a uniform series of text-books for use in the public schools of the State. Bids must be accompanied by certified check for \$1,000, to be forfeited to the State in case of failure to enter into proper bond and contract if awarded. Contracting publishers shall arrange with at least one dealer or agent at each county seat, who may charge a commission not exceeding 10 per cent on the contract prices; but contractors shall furnish any citizen books at contract prices and deliver same to any railroad station in the State upon receipt of cash orders of not less than \$10. Upon a vote of two-thirds majority, any district or city may purchase text-books out of incidental funds and furnish same to pupils free. Contracts shall be entered into for periods of five years, and to use any other book than those adopted, except as a reference book or in a branch not covered by books adopted, is punishable by a fine of from \$25 to \$100, or imprisonment not to exceed ninety days, or both. It shall be unlawful for any school board to purchase or contract for any map, chart, globe, or other school apparatus, except scientific apparatus for high schools, unless same shall have been submitted to the text-book commission at a regular or special session and by them approved and a maximum price therefor fixed by said commission.

Buildings.—The district meeting shall have power to designate a site for a schoolhouse, which, when not included within the limits of a town or village, shall contain not less than 1 acre; to build, hire, or purchase a schoolhouse, to keep it in repair and furnish the same with the necessary fuel and appendages, or may authorize the sale thereof. In cities the board of education exercises sole control over school property.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—The proceeds of all lands granted or to be granted by the United States for the support of schools, and the 500,000 acres of land granted to the new States under an act of Congress distributing the proceeds of public lands among the several States, approved September 4, 1841, and all estates of persons dying without will or heir, and such per cent as may be granted by Congress on the sale of lands in this State shall be the common property of the State, and shall be a perpetual school fund, which shall not be diminished, but the interest of which, with all the rents of school lands and such other means as the legislature may provide by tax or otherwise, shall be inviolably appropriated to the support of common schools.

The State superintendent, secretary of state, and attorney-general shall constitute a board of commissioners for the management and investment of the State permanent school, State Normal School, and State University funds. The board shall invest moneys belonging to the permanent school fund, the State Normal, and State University funds in the bonds of the State of Kansas or of the United States, bonds of the several school districts of the State, bridge bonds, court-house bonds, or in county, township, or city refunding bonds of the State, provided that the indebtedness of the locality issuing bonds shall not exceed 15 per cent of its assessed valuation.

The income of the State school funds shall be disbursed semiannually (in February and August) by order of the State superintendent to the several county treasurers and thence to the school districts in equitable proportion to the number of children 5 to 21 years of age, provided each school district has maintained a common school at least three months in each year.

All moneys paid by persons for exemption from military duty, the clear proceeds of estrays, and the proceeds of fines for any breach of the penal laws shall be exclusively applied in each county to the support of its common schools. Every insurance company doing business in the State shall, in addition to other charges, pay into the State treasury for the benefit of the annual school fund the sum of \$50.

For the purpose of affording the advantages of a free education to the children of the State, the State annual school fund shall consist of the annual income derived from the interest and rents of the perpetual school fund.

Taxation.—It is within the power of the school district to vote a tax annually for school purposes, not exceeding 2 per cent on the taxable property in the district, which shall be distributed as the meeting shall deem proper in the payment of teachers' wages, to purchase or lease a site and to provide buildings and incidentals.

The board of high school trustees shall estimate the amount needed for building purposes, for payment of teachers' wages, and building and contingent expenses, and the county commissioners shall levy a tax not to exceed 6 mills on the dollar for the purpose.

Cities of the first class (over 15,000 inhabitants) shall levy, for teachers' wages, repairs, incidental expenses, and maintenance of schools, not more than 8 mills on the dollar where the assessed value is greater than \$3,000,000; but in cities of 30,000 inhabitants or more, not to exceed 12 mills and an additional 3 mills for building purposes. Where the assessed valuation is less than \$3,000,000, the board of education may levy not to exceed 10 mills on the dollar.

KENTUCKY.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State board of examiners—State superintendent—County superintendent—County board of examiners—District trustees—City school board.

State board of education.—The State superintendent, together with the secretary of state and attorney-general shall constitute the state board of education, which shall take, hold, and dispose of real or personal estate for the benefit of the common schools, the bonds, certificates, and other evidences of indebted-

ness being in the custody of the chairman. The board shall meet only on the written call of the chairman; it shall constitute a standing committee to prepare rules, by-laws, and regulations for the government of the common schools, to be adopted and enforced under the authority and direction of the county superintendents, trustees, and teachers; to prescribe regulations for the management of county teachers' libraries, and prepare suitable lists of books for district libraries, with regulations for the management thereof; to prescribe and publish a public graded course of study for the common schools, specifying the order of studies and the time to be allotted to each, which shall be enforced by the district trustees.

State board of examiners.—(See Teachers—Appointment, qualifications, and duties.)

State superintendent.—There shall be elected every four years a State superintendent of public instruction, who shall give bond for the faithful performance of his duty to the amount of \$25,000. His salary shall be \$2,500 per annum, and he shall have all the office fixtures, stationery, books, postage, fuel, and lights needed to carry on the work of his office. He may appoint three clerks, one at a salary of \$1,500, one at \$1,000, and one at \$850 per annum, to be paid out of the common school fund. He shall be a member of the State board of examiners; keep his office at the seat of government in such suitable buildings as may be provided; devote his entire time and attention to the duties of his office; keep an account of all orders drawn or countersigned by him on the auditor, and of all changes in the offices of county superintendents; biennially, on or before the meeting of the general assembly, make report of the condition, progress, and prospects of the common schools, the amount and condition of the school fund, how its revenue for the two previous school years has been distributed, the amount produced and disbursed for common school purposes from local taxation and other sources, and how and for what the same was expended, an abstract of the county superintendent's reports, the practical workings of the common school system of the State, with suggestions as to any alterations it may require, together with such facts, statistics, and information as may be deemed of interest to be known, and shall cause to be printed a copy for each school district and for each county and city superintendent, 750 copies for the use of the members of the general assembly and for exchange with the superintendents of public instruction of other States, and 500 copies for discretionary distribution. He shall include in his report the condition of the institutions for the blind, the deaf and dumb, and the feeble-minded. He shall prepare suitable blanks for reports, registers, certificates, notices, and such other official documents as the law requires, and shall transmit them to the person intrusted with the execution of the school law. He shall biennially collect, arrange for publication, and index the school laws, omitting all that has been repealed and inserting in the proper place that which is amendatory. He shall report any neglect of duty or any misappropriations of school funds by county superintendents to the county attorney, who shall proceed against the delinquent.

County superintendent.—There shall be a county superintendent of common schools in each county, who shall be possessed of moral character and ability to manage the common school interests of the county efficiently. He shall possess a good English education, shall be competent to examine the teachers who shall apply to teach the common schools in the county, shall be 24 years old, a citizen of Kentucky, and have resided two years next preceding the election in the State and one year in the county for which he is a candidate. To be eligible to the office he shall hold from the State board of examiners a State diploma or State certificate which will not expire during his proposed term of office, or a certificate of qualification of the grade of a county certificate of the first class, which may be granted on an examination held before the State board or upon a written examination held by a special county board composed of the county judge, county clerk, and a competent person selected by them, upon a series of questions for the examination prepared and forwarded by the State board of examiners, which shall be securely sealed until the hour of examination, when, after the seal of the package containing the sealed envelope has been duly inspected, the envelope shall be opened by the county clerk in the presence of the persons assembled. In case of sickness or other disability of either the county judge or clerk, the county attorney shall perform the duty required of the absent member. The examination shall be held in every county on the last Friday in July and August next preceding the election of county superintendents, and the examination may be continued during the following Saturday by examiners if deemed necessary, and the written answers of each examination shall be immediately forwarded by the

county judge or county clerk by registered mail to the State board of examiners, together with a fee of \$2, which shall be paid to the two examiners, and the sworn statements of the members of the special board that the examination had been conducted in their presence in strict accordance with these provisions and that no applicant had, directly or indirectly, received assistance. The State board of examiners may, if they deem the answers sufficient, grant a certificate (which will not entitle to teach), but if they refuse they shall notify the county clerk. The members of the special county board shall receive a reasonable compensation, fixed by the fiscal court. In counties embracing any city of the first class maintaining a system of public schools separate and distinct from the common schools of the county, no person shall be eligible to the office of county superintendent other than a resident of such county outside of such city or town. No county judge, justice of the peace, circuit clerk, county clerk, county attorney, county surveyor, coroner, assessor, trustee of a common school district, or a teacher while engaged in teaching shall hold the office of county superintendent.

The county superintendent shall be elected by the qualified voters of each county for four years and shall give bond to the amount of the school fund for the year. In case of contested election the State superintendent shall have power to recognize a superintendent from among the contestants until the matter has been settled. The county superintendent shall have power, previous to the 1st day of April of each year, to lay off, abolish, or consolidate districts, and, if necessary, may lay off anew the districts belonging to his county. But all districts shall, as soon as practicable, be made to contain 45 children or more; and no district shall include more than 100 pupil children unless it contains a city, town, or village, or a high school, academy, or college entitled to a share of common school funds. He may condemn any schoolhouse or appurtenances if unfit for school purposes; shall at least once a year make an official visit to each school district, but shall not visit more than three in one day, noting in a book kept for the purpose the number of pupils in attendance, the number absent and the cause therefor, the names of children unable to purchase books, the condition of the schoolhouse and its appurtenances of every kind, the qualifications and efficiency of the teacher, the conduct and standing of the pupils, the method of instruction, the discipline and government of the school. He shall counsel the teacher and trustees in regard to their duties. He shall make a certified statement to the State superintendent, giving the whole number of children 6 to 20 years residing in his county and in each of its districts, including each city and independent district, and he shall be individually responsible to the teacher or the district for any loss sustained by the teacher or district by reason of any error made in reporting the census. He shall superintend the taking of the census by the district trustees, shall ascertain the amount required to purchase text-books for indigent children, and pay the teachers monthly. He shall make an official report to the State superintendent, giving in tables of details and aggregates the school districts of his county by number; the names and addresses of trustees of each district, with date of expiration of term; the districts in which schools were taught, and the time taught; the highest, lowest, and average number of children at school; the cost of tuition of each child for the session and by the month; the number of private schools, academies, and colleges taught in the county, and the length of session of the same; the number of teachers employed (male, female, and total) for the common schools; the average monthly wages of male teachers, female teachers, and of total teachers; the name and address of teachers resident in his county, with grades of certificates of each; the amount of money raised for common school purposes in the county by local tax or otherwise, and the purposes for which disbursed; the number and kind of schoolhouses; the number built and the value of each; the number of district libraries (stating if there be a county library), the number of volumes in each and the increase during the year, and the amount he has received for official compensation and expenses. For willful failure to be present at his office at the time appointed to receive reports, or for failing to make reports herein required, he shall be fined a sum not exceeding \$50. He shall be at his office at the county seat on the second Saturday of each month, and at such other times as may be necessary to transact his official business. He may remove trustees for cause, and shall decide questions of school administration, with appeal to State superintendent. His compensation shall be fixed by the fiscal county court at from 8 to 20 cents for each child enumerated by the district trustees, the amount to be paid out of the county levy; but no salary shall be less than \$400 nor more than

\$1,500, and in fixing the amount no child under a city superintendent of a city, first, second, third, or fourth class, shall be counted. He shall also be furnished a suitable office large enough to accommodate the county teachers' library. He shall not buy directly or indirectly any teacher's claim, nor act as an agent for the sale of any text-book. Violation of this provision shall cause him to be fined from \$100 to \$1,000. In case of vacancy the county judge may appoint a successor.

County board of examiners.—The county superintendent shall appoint two strictly moral and well-educated persons holding county certificates of the first class, State diplomas, or diplomas of some literary institution of high learning, who, together with himself, shall constitute a board of examiners for the county. (For duties of this board, see Teachers—Appointment, qualifications, and duties; Schools—Text-books.

District trustees.—Each district shall be under the control of three trustees, who shall be of good moral character, at least 21 years of age, and, for white schools, able to read and write, one of whom shall be elected annually for a term of three years. No person holding the office of trustee of any private school shall be eligible to hold the office of trustee of any common school. The vote in electing a trustee shall be viva voce and be taken at the schoolhouse. At this election the electors shall be the qualified voters of the district and any widow having a child 6 to 20 years of age and any widow or spinster having a ward 6 to 20 years of age. Vacancies shall be filled by the county superintendent. The trustees may take land by purchase or donation, the county superintendent consenting, for the purpose of erecting a schoolhouse, may build thereon, and provide the appurtenances. They may change the location of the house and sell the site. They may have land to the extent of 1 acre condemned, provided the owner does not have a residence, garden, orchard, or burying ground upon it. Whenever there is a district tax levied the trustees shall appoint a treasurer, who shall hold his office four years, giving bond to double the amount of taxes collected. The trustees shall employ teachers in writing, and shall visit all the parents of pupil children and urge upon them the necessity of prompt and regular attendance at school. At each meeting they shall carefully examine the teacher's register, and shall consider the condition of the school in all its features of buildings and instruction and provide for any deficiency. Upon complaint of the teacher in writing the trustees shall have power, after investigation, to suspend a pupil or expel him from school. The district trustees shall take an exact census of all the children that reside in their district on the 1st day of April who will be on the 1st day of the following July between the ages of 6 and 20 years, and on or before the 1st of May report a list of the same to the county superintendent and a duplicate list to the clerk of the county court, to be filed in his office, specifying the name, age, sex, and names of the parents or guardians of each child, to be entered in a book. Failure to take the report shall render the trustees liable to a fine of \$20 or more, and willful falsification of the census makes the guilty person liable, in addition to the punishment of perjury, to a fine of not less than \$50. No trustee shall purchase teachers' claims, directly or indirectly, nor be actuated by pecuniary motives in securing the appointment of any teacher, under penalty of the punishment visited upon bribery, and in general any person who is elected or appointed trustee of a common school but shall willfully fail or neglect to perform his duties shall be fined \$50.

On the petition of 10 legal voters who are taxpayers, the county judge may fix the boundary of any proposed graded common school district, a majority of the trustees of any common school district affected being favorable, and arrange for a vote of the white taxpayers upon the question of an annual tax not to exceed 50 cents on each \$100 of property belonging to the white voters in the district, town, or city, or a poll tax not exceeding \$1.50 per capita on each white male inhabitant over 21, or both an ad valorem and a poll tax, for the purpose of maintaining a graded common school district, and for erecting, purchasing, or repairing suitable buildings therefor if necessary. At the same time a board of six trustees shall be elected for terms of three years, two to retire annually. The trustees shall employ the principal and all teachers and fix their compensation; may add other branches to the curriculum required by law. Any city of the first, second, third, or fourth class may accept the provisions of this law.

City school boards.—There shall be elected in each legislative district in cities of the first class two qualified persons as school trustees for terms of two years, one going out annually. The school board shall have power to govern itself by such rules and regulations for school purposes as they may deem

proper, including the election of principals and teachers and the branches to be taught and text-books used. Biennially it shall elect a superintendent.

In cities of the second class there shall be a board of education of two trustees from each ward in the city, to be elected by the qualified voters at large, and the control and management of the public schools of the city and the property and funds thereunto belonging shall be, and is hereby, vested in said board.

In cities of the third and fourth classes the board of education shall consist of two trustees from each ward for terms of four years, one-half the board retiring every two years. The control and management of the public schools of the city and the school property and funds is vested in the board.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—No person shall be allowed to teach a private or other school in any district schoolhouse unless he be of good moral character and have the consent of at least two of the trustees and a certificate of qualification. No person shall be appointed or employed as superintendent, principal, or teacher in any graded common school who is not a person of good moral character and who has not a county certificate, as required by the common school law of Kentucky. In cities of the first class the board of education shall have power to examine, or cause to be examined by competent persons, all applicants for the position of principal, teacher, or professor. In cities of the second class the board shall appoint a board of examiners of from two to five competent persons, who, in connection with the superintendent, shall examine all applicants for the position of superintendent, principal, or teacher of the schools.

In cities of the third and fourth classes the board shall have power to hold examinations, determine the qualifications of its superintendent, principals, and teachers, and issue certificates to them.

There shall be three grades of certificates issued to teachers of common schools: A State teacher's diploma, a State teacher's certificate, and a county certificate, the last being first, second, or third class.

The State board of examiners, consisting of the State superintendent and two professional educators appointed by himself, shall examine all applicants personally applying to them for certificates of qualification as county superintendents, or for State diplomas or State certificates. The board shall prepare the series of questions for examination of candidates for county superintendents, and also five series of questions for the examination of teachers, but shall submit the same to the board of education before forwarding them to the county superintendents.

The county superintendent shall appoint two strictly moral and well-educated persons holding county certificates of the first class, State certificates or diplomas, or diplomas from some literary institution of high learning, who shall with himself constitute a board of examiners for the county. This board shall grant certificates to persons 18 years of age or over upon written examinations.

State diplomas may be issued by the State board of examiners after a personal examination held at the State capital on the last Wednesday of June and August of each year upon the subjects embraced in the common school course of study, and also upon the science and art of teaching, psychology, English literature, algebra, higher arithmetic, geometry, physics, and elementary Latin; and the applicant must obtain 90 per cent on all subjects and not less than 70 per cent on any one; must be at least 24 years of age, have taught in the State at least two years, and shall furnish satisfactory evidence of unexceptionable moral character. The diploma shall be good throughout the State and shall qualify the holder as eligible for candidacy as a county superintendent (which see). A fee of \$5 shall be paid by each candidate to the two appointed members.

A State teacher's certificate may be granted by the State board of examiners upon the recommendation of the county board of examiners after a written examination held in applicant's county, to one who has attained an average grade of 90 per cent, with not less than 70 per cent in any one branch, upon the subjects embraced in the common school course of study and also in English literature, elementary algebra, higher arithmetic, and the science and art of teaching, including the elements of psychology. The applicant attaining the average required shall be at least 21 years old, shall have two years' experience

in teaching, and shall present satisfactory evidence of unexceptionable moral character. The State certificate entitles the holder to teach in the common schools of the State, graded or city, for eight years, unless the holder shall be unengaged in active school work for two years, and may, if unrevoked, be renewed for another eight years.

County certificates of the first class require an average of 85 per cent upon all the subjects of the common school course and upon the science and art of teaching, and not lower than 65 per cent in any one branch; second class, an average of 75 per cent, and not less than 55 per cent on any one subject; third class, an average of 65 per cent, and not lower than 50 per cent on any one subject. The first-class certificate is good for four years; second-class, two; third-class, one, and shall not be given twice to the same person. A certificate of the third class does not entitle the holder to teach in a district having 55 or more children, and a certificate of the second class does not entitle the holder to teach in a district reporting 75 or more pupils. A person having taught for eight consecutive years in the same county under first-class certificates may have the last one renewed annually for four years. (See also Organization of system—County superintendent.)

It shall be the duty of the teacher to keep a register, which shall be graded for four years' work, and shall be delivered to the chairman of the board of trustees at the close of every term. The section allotted to each year shall be divided into two parts, designated monthly and term summary. The teacher shall faithfully enforce the course of study, the use of the prescribed text-books, the good conduct of pupils while in school or on the road to or from it, and for good cause may suspend pupil. But no teacher shall be required to teach any other than the common school branches unless specified in the contract.

Preliminary training.—The State normal school for colored persons shall be under the control and supervision of a board of trustees composed of the State superintendent, who shall be chairman, and three intelligent and discreet persons, residents of Franklin County, to be appointed by the governor, with the approval of the senate, for terms of three years, one to retire annually. They shall adopt rules for the government of the school, shall prescribe its course for the training of teachers and the requisites for admission, and select the instructors; but every pupil must be at least 16 years of age, possess good health, and satisfactory evidence of good moral character, and sign a written pledge that he or she will, as far as practicable, teach in the colored common schools of Kentucky a period equal to twice the time spent as a pupil in the normal school, together with such other conditions as may from time to time be required; but tuition shall be free to Kentuckians. The sum of \$8,000 shall annually be appropriated out of the State treasury to pay the teachers and defray other necessary expenses, which, together with the amount received under the act of Congress of August 30, 1890, shall be known as the colored normal school fund. The diplomas granted by the board to graduates shall entitle the recipient to teach in any of the colored common schools of the State. In the school there shall be a department of agriculture and the mechanic arts.

In cities of the second class the board of education may maintain a normal school or training class for the purpose of training graduates of the high school and others to be teachers in the schools of the city.

Institutes.—The county superintendent shall organize annually a teachers' institute for the normal instruction, improvement, and better qualification of the teachers of his county—one for white and one for colored teachers. The institute shall occupy not less than five nor more than ten days, and shall be held between the 1st day of July and the 1st day of November. The superintendent of public instruction and the two professional members of the State board of examiners shall prepare the programme and a syllabus of each subject, both of which shall be furnished each member of the institute, and shall be faithfully and efficiently carried out. Every teacher of a common school, including teachers of the graded common schools in cities of the fifth and sixth classes who hold a State diploma, State or county certificate, or who contemplate applying for certificate of qualification to teach in the common schools, shall attend the full session of the institute in his home county, unless he is teaching in another county in which the institute is yet to be held, or has attended the institute of a county in which he has a contract to teach; but in teaching in a county other than his home county whose institute is yet to be held, he must attend the full session of the latter. The county superintendent shall revoke the certificate of any teacher who shall fail or neglect to attend the full session of the insti-

tute, unless the superintendent shall be fully satisfied that such failure has been caused by actual sickness or other disability, and after the institute has been held it shall be unlawful to grant any person a certificate to teach at any time during that school year unless the person has attended the full session of the institute. During the institute there shall be a suspension of such other schools as are in session. At the close of the institute a certificate of attendance shall be given to the teacher, who shall file it with the board of trustees, which shall report the fact. Any four or fewer counties may hold a joint institute. The county superintendent shall collect from \$1 to \$2 from each person in attendance, 25 cents of which shall be paid into the county library fund and the rest shall be applied to meeting the necessary expenses of the institute.

At each session of the institute every subject embraced in the common school course shall be brought before the institute, illustrated and described, and every feature of school organization and school management, together with the whole work of the teacher, shall be considered, and the common school laws of the State read and expounded.

During the session of the institute there shall be held a county teachers' association, and one hour in the afternoon or the night meeting shall be daily set apart for this purpose. The object of the association shall be primarily to discuss and devise the best ways and means of promoting the interests of education, the improvement of teachers, and the methods of teaching, and especially to devise means for securing better schoolhouses, better attendance, and local aid for common schools.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—No school shall be deemed entitled to any contribution out of the school fund unless the same has been actually kept, or is under contract to be kept, by a qualified teacher for five months during the same school year, and at which every child residing in the district between the ages of 6 and 20 has had the privilege of attending free of expense, but it shall not be lawful for any white child to attend any common school provided for colored children or any colored child to attend any common school provided for white children. (For the source of support of colored schools see Finances—Taxation. In cities of the first, second, third, and fourth classes the city board of education has complete control of colored schools.)

No point in the boundary of any proposed graded common school district shall be more than $2\frac{1}{2}$ miles from the site of its proposed schoolhouse.

Character of instruction.—The State board of education shall prescribe and publish a public graded course of study for the common schools, specifying the order of studies and the time to be allotted to each, but the course shall embrace spelling, reading, writing, arithmetic, English grammar, English composition, geography, physiology, and hygiene and the effects of alcoholic drinks and narcotics, civil government, United States history, and the history of Kentucky. The majority of the white voters of a locality may establish a graded-school district for white persons, and a majority of the colored voters may establish a graded-school district for colored persons. In cities of the first class the board of education shall prescribe the branches of education, other than those required by law, to be taught, and the text-books used, but no catechism or other formula of religious belief shall be taught or inculcated. In cities of the second class children from 4 to 6 years of age may be instructed by kindergarten methods, and the board of education may extend the required curriculum, establishing high schools. In cities of the third and fourth classes the board of education may extend the required curriculum, establishing high schools and maintaining kindergarten and manual-training schools.

Text-books.—The county board of examiners in each county shall adopt, on penalty of a fine of \$200, a list of text-books on the subjects taught in the common schools, which shall be used in the common schools for five years. Any county board of examiners, whenever any publisher or person selling text-books desires to have his books adopted in the common schools in any county, shall require to be filed a sample copy of each, with its lowest retail price (which shall not be higher than the price obtained in any other section of the United States) at which it is to be sold to patrons and pupils, and shall execute a bond of \$10,000, with good security within the State. In cities of the

first, second, third, and fourth classes the board of education select the textbooks.

Buildings.—The district trustees, with the consent of the county superintendent, may take land for the purpose of erecting thereon a schoolhouse, provide for and secure the erection of the same, construct such outbuildings and inclosures as shall be conducive to the protection of the property and the comfort and decency of the pupils and teachers. They shall have power to recover for damage done. The county superintendent may condemn a school building as unfit for use, and if the trustees have no funds to put the condemned property in a habitable condition a capitation tax shall be levied not exceeding \$1 a year for four years and an ad valorem tax not exceeding 25 cents on the \$100 property. Trustees may borrow money to build if it can be repaid in four years at rate of taxation provided. In cities the board of education has control. In graded common school districts no building shall cost more than \$15,000, unless it be a city of the first to fourth class, having adopted the provisions governing graded common school districts, when the maximum shall be \$100,000.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The school fund shall consist of the interest on the bonds of the Commonwealth for \$1,327,000 in aid of common schools, at the rate of 6 per cent per annum, payable semiannually; the dividends on 798 shares of the capital stock of the Bank of Kentucky, representing a par value of \$79,800, owned by the State; the interest, at the rate of 6 per cent, payable annually, on the surplus of \$381,986.08 now due the several counties and remaining a perpetual obligation against the Commonwealth for their benefit; the interest, at 6 per cent per annum, payable semiannually, on \$606,641 received from the United States under act of March 2, 1891; such proportions of fines, forfeitures, and licenses which may be realized by the State as the amount of taxes for common school purposes bears to the whole State tax other than for the benefit of the agricultural and mechanical college. The fund shall be used to pay the expenses of the State department of education and the payment of teachers of the common schools. The fund shall be distributed annually by the State superintendent according to the pupil children in each county and school district.

Taxation.—There shall be an annual tax of 22 cents on each \$100 of value of all real and personal estate and corporate franchises directed to be assessed for taxation, which shall be distributed as stated under "Funds" above. Whenever there shall be a tax in any common school district or graded school district it shall be the duty of the trustees to appoint a district treasurer. The tax shall be levied on the property of the district immediately preceding the levy by the trustees, which the treasurer shall collect. Unless there are sufficient funds on hand which may be used to pay the contingent expenses incident to rendering the schools comfortable, the trustees shall assess and the treasurer of the district shall collect a capitation tax of \$1.50 or less on all persons having children attending the common school of the district, and shall be used to pay for fuel and other things needful to keep the schoolhouse warm, clean, and comfortable. In the establishment of a graded common school, a minimum tax is fixed. (See Organization—District trustees.) In case of cities taking advantage of the law regarding the organization of a graded common school district, bonds may be issued to 2 per cent of the taxable property of the city instead of being limited to \$15,000, as in the case of the ordinary graded common school district.

In cities of the first class, organized under the general act for them, the board of education collect a tax of not less than 33 cents on the \$100 of property assessed for city taxation. In cities of the second class the general council shall be requested by the board of education to collect the amount required to defray the expenses of maintaining schools, improving or constructing buildings, etc. In cities of the third and fourth classes the board of education shall estimate the amount necessary, as in the case of cities of the second class, and the general council shall collect the amount, provided that in any one year it shall not exceed 50 cents on each \$100 of assessed city property.

LOUISIANA.

1. ORGANIZATION OF SYSTEM.

State board—State superintendent—State institute conductor—Parish school board—Parish superintendent—District board of directors—Parish of Orleans.

State board.—The governor, State superintendent, attorney-general, and seven members, one from each Congressional district, appointed by the governor, shall compose the State board of education. The appointed members shall receive as compensation for their services a per diem for actual service and their traveling expenses equal to that paid members of the legislature. They may require reports from the parish superintendent, and shall appoint for each parish, with the exception of Orleans, a board of school directors. The board shall prepare rules for the government of the common schools (which shall be enforced by the parish superintendent and school boards), give such directions as it may deem proper concerning the branches to be taught, and strictly enforce uniformity of textbooks.

State superintendent.—There shall be elected by the qualified voters of the State a superintendent of public education, who shall hold office for four years, at an annual salary of \$2,000; a vacancy to be filled by the governor, with advice of senate. He shall be provided with an office at the seat of government and allowed such incidental and clerical expenses as may be appropriated by the legislature. His duties are to supervise all boards of education and all State, common, high, or normal schools, visit the parishes at least once a year, make a biennial report upon the condition and progress made and possible improvements to be made in the common schools, the amount and condition of the school funds and their distribution, the amount and disbursement of local taxes and other sources of revenue, an abstract of the parish and city superintendent's reports, and all facts of interest to the public schools. He shall have printed a copy of his report for each school district, 200 copies for the legislature and for exchanges, and 300 copies for distribution. He shall decide all controversies among school officers or teachers, from which decision an appeal may be taken to the State board.

State institute conductor.—(See Teachers, Institutes.)

Parish school board.—The State board shall appoint a board of school directors, consisting of not less than five nor more than one from each ward, to serve four years. The parish board shall elect a superintendent, and may appoint auxiliary visiting trustees for each ward or school district, report all deficiencies in the schools and neglect of duty by officers or teachers, visit the schools, apportion the school fund among the districts, determine the number of schools to be opened, the location of the schoolhouses, the number of teachers to be employed and their salary, and in general to enforce the law. The board holds four regular meetings during the year, and its members receive a compensation of not more than \$2 per diem, also mileage not to exceed 5 cents per mile. By a two-thirds vote they may change the location of a schoolhouse.

The president of the board, a person appointed by said board, and the parish superintendent form the committee for appointing teachers.

Parish superintendent.—The parish school board elect a parish superintendent, who shall be of age and possessed of moral character and ability to manage the common school interests. His salary shall not exceed \$1,200 per annum. He shall visit at least once each school in the parish, and whenever his services are quite efficient and highly satisfactory to the school board they may grant him his traveling expenses, not to exceed \$125 per annum, and his expenses to the convention of superintendents. He is a member of the committee for appointing teachers. He shall make an annual report to the State superintendent, showing in tables an aggregate of the school districts, the districts in which schools were taught, and the length of time taught, the highest, the lowest, and the average number of children at school, the cost of tuition of each child for the session and month; number of private schools, academies, and colleges taught in the parish, and the length of session of the same; the number of teachers employed, male and female, and their average wages; the sum raised by local tax or otherwise, and the purpose for which disbursed; the number, increase, kind, and value of schoolhouses; number of district libraries, volumes in each, and the increase during the year; and the sums received and expended. Failure to comply causes him to lose \$10 per week for the full time of his delinquency. He shall be at his office at the parish seat on the first

Saturdays of January, April, July, and October and at such other times as may be necessary.

District board of directors.—The parish board of directors are authorized to appoint auxiliary visiting trustees for each ward or school district or school in the parish. Such trustees shall make quarterly reports to the parish boards concerning the scholastic and material condition of their charges.

Parish of Orleans.—All the public schools of the parish of Orleans shall be under the direction and control of a board of directors of 20, 8 of whom shall be appointed by the governor, with the approval of the State board, and 12 by the city council of New Orleans, who shall hold for four years, one-fourth to retire annually. The board fixes the salaries of teachers, limits the expenditure to one-ninth of the whole amount provided for the schools, provides rules for examining teachers, and elects them from those passing and from graduates of the normal schools, may establish night and normal schools, appoint a superintendent, and shall make a full report to the common council of New Orleans.

The superintendent shall receive an annual salary of \$2,500, hold office on good behavior for four years, is ex officio member of the board who have elected him to assist them in organizing and improving the city system of schools.

2. TEACHERS.

Appointment—Certificates—Duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—The president of the parish school board, a member appointed by that board, and the parish superintendent shall constitute a committee to appoint the teachers in the common schools of the parish and fill vacancies in the order of merit, and no person may be employed who has not obtained a license for the year in which the school is to be taught, of a grade sufficient to cover the requirements of the school to which he may be appointed.

Certificates.—The examinations to ascertain the fitness of candidates are under the control of the parish superintendent, who is assisted by two persons appointed by the school board of the parish, all of whom must agree before a certificate may be issued. The applicants must pay a fee of \$1 and satisfy the examiners of their good character. To obtain a third-grade certificate the applicant must be found competent to teach spelling, reading, penmanship, drawing, arithmetic, English grammar, geography, history and Constitution of the United States, constitution of the State of Louisiana, physiology and hygiene, with special reference to the effects of stimulants and narcotics, and the theory and art of teaching. To obtain a second-grade certificate the applicant must be found competent to teach all the foregoing branches, and also grammatical analysis, physical geography, and elementary algebra. To obtain a first-grade certificate the applicant must be found competent to teach all the branches required for a second-grade certificate, and also higher algebra, natural philosophy, and geometry. A special certificate of this grade may issue on a satisfactory examination in the study or studies to be taught in any special academic department, which shall entitle the holder to special appointment in a department where such studies may be taught. Those holding the diploma of the Peabody Normal College or of the Louisiana State Normal School shall be entitled to a first-grade certificate, good for four years and renewable at the option of the State board.

A third-grade certificate shall entitle the holder to teach for one year; a second-grade certificate, three years; a first-grade certificate, five years. If a person pass a satisfactory examination before any parish superintendent, obtain a certificate of any grade, and purpose to teach in another parish, it shall be lawful for the superintendent holding the papers written at the examination for such certificate, upon the request of any parish superintendent, to transfer such papers to him; and if found satisfactory, a certificate thereon of the proper grade and for the same length of time as the original certificate may be issued by him to the same effect as though he had examined the applicant himself.

Duties.—It shall be the duty of each teacher to keep a register as the parish superintendent may require, and to make a report of enrollment, the highest, the lowest, and the average attendance, the books used, branches taught, number of pay pupils, if any, and such other statistical information as may be required. For failure the parish superintendent shall withhold \$2. The course of study must be faithfully enforced and the rules and regulations obeyed, and failure of the teacher to comply with these provisions may, on complaint,

cause his or her removal. The teacher shall have the power to hold every pupil accountable in school for disorderly conduct on the playgrounds or to suspend pupils. The teacher must attend State and county institutes.

Preliminary training.—The State normal school shall have for its object the training of teachers for the public schools of Louisiana, and shall be open to white persons of either sex of 15 (women) or 16 (men) years of age, of good moral character and proficiency in the common school branches, provided they give assurance in writing of intention to teach in the schools of the State one year after graduation. Tuition is free. The board of administrators is empowered to confer diplomas upon the graduates entitling them to a first-grade teacher's certificate, valid for four years in any town or county, subject to renewal at the option of the board; in addition, the diploma gives precedence if the board so order.

Institutes.—The parish superintendent may devote the first Saturday of each month during the time the common schools are in session in the parish to holding institutes for the improvement of teachers in their calling. Three hours constitute a legal session. Teachers failing to avail themselves of this opportunity shall forfeit one day's pay, unless excused, or living 10 miles away from place of meeting, or having to cross water; and a parish superintendent shall forfeit \$5 for failure to comply with the provisions regarding them, unless physically unable to comply. The superintendent shall appoint one of the best qualified teachers as institute manager, who shall receive \$2.50 per day. The school board of the parish of Orleans may inaugurate institutes as set forth above.

State institutes shall be held in the aggregate for twenty weeks, at such places and times as may be decided upon by the State superintendent and the president of the State normal school, in conjunction with the respective parish superintendents. The State superintendent and the president of the normal school shall select a State institute conductor, who shall have immediate charge of the State institutes, and his salary shall be payable from any funds donated by the board of trustees of the Peabody fund or appropriated by the general assembly.

3. SCHOOLS.

Attendance—Character of instruction—Text-books.

Attendance.—White and colored persons are taught in different schools. The school age is from 6 to 18. The school boards may assess and collect \$1 per annum from each family which sends a child to the common schools, to be used in purchasing fuel and other things conducive to the comfort of the pupils.

Character of instruction.—The branches required to be taught are orthography, reading, writing, arithmetic, geography, grammar, United States history, laws of health and the injurious effects of narcotics and stimulants, physical education, and such other branches as the State or parish school board may require; and these elementary branches may be taught in the French language in the localities where that language predominates, if no additional expense is incurred. The parish school board shall have authority to establish graded schools and central or high schools under the sanction of the State board, provided site and buildings are not paid for from the school fund; but the parish of Orleans shall not require the sanction of the State board.

Text-books.—The State board shall strictly enforce a uniformity of text-books and shall adopt a list, which shall not be changed for four years.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—The school fund of the State shall consist of the interest on the proceeds of all public lands heretofore granted by the United States for the use and support of the public schools; of all lands and other property which may hereafter be bequeathed or donated to the State or generally for school purposes; all funds or property other than unimproved lands bequeathed or granted to the State not designated for other purposes, and the proceeds of vacant estates. The legislature may (by the constitution) also appropriate, in whole or in part, the proceeds of the public lands not designated for any other purpose. This fund is distributed among the parishes according to the number of children from 6 to 18 years of age.

All fines imposed by the several district courts for violation of the law and all

forfeited bonds in criminal cases (the parish of Orleans excepted) are applied to the support of common schools.

Taxation.—The general assembly shall levy an annual poll tax for the maintenance of public schools on every male person of 21 years or more, which shall never be less than \$1 nor more than \$1.50, and belongs to the parish in which collected. There shall be a State school tax to be distributed to the parishes in proportion to the children from 6 to 18 years of age, which is fixed annually by the State legislature. The police jurors of the several parishes and the boards of trustees, aldermen, and legal representatives of cities, towns, and villages, except the parish of Orleans, may levy for the support of the common schools of their respective parishes not less than $1\frac{1}{2}$ mills of the 10 mills tax on the dollar of the assessed valuation. Whenever one-tenth of the property taxpayers of any parish, city, or incorporated municipality shall petition the police jury or municipal authorities to increase the rate of taxation for the purpose of constructing public buildings, the body petitioned shall order a special election to authorize the levy.

MAINE.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—Superintending school committees—Superintendent of schools—Truant officers.

State superintendent.—Appointed by the governor and confirmed by the council; term of office, three years. An office is provided for him at the capitol. He shall devote all his time to the duties of his office, which are: To exercise a general supervision of all public schools, and to advise and direct town committees by circular letters and personal conference; to obtain information as to the school systems of other States and countries, and to disseminate the same, with practical suggestions, through public addresses, circulars, and the press; to encourage an interest in education among the people, and stimulate teachers to well-directed efforts; to arrange for the holding of annual State educational conventions, and county teachers' institutes if sufficient encouragement is afforded by citizens, and to prepare, print, and distribute important portions of the proceedings of such conventions; to prepare courses of study; to hold public examinations and to issue teachers' certificates to applicants found qualified therefor; to keep in his office a list of such teachers, and send the same, with other information, to school committees and superintendents upon request; to assume control and management of free public schools established and maintained by gifts or bequests, when such gifts or bequests so specify, and to carry out the provisions of such gifts or bequests when approved by the governor and council; to report annually to the governor and council the results of his investigations and of the school returns, with his recommendations; to compile, print, and distribute biennially the amended school laws of the State, and to issue annually circulars of information and advice to school officers relating to new enactments; to furnish to school officers blank books for keeping itemized records of all moneys expended for schools, said books remaining the property of the State; to furnish forms (see Teachers—Duties) for all lawful or necessary returns, and on March 1 to forward to town clerks blanks for the annual school return, and registers for the school year commencing April 1 following; on June 1 to notify superintendents whose returns are delinquent; on July 1 to ascertain the number of children between the ages of 4 and 21 in towns from which returns are received, and furnish a list of same to the State treasurer.

Superintending school committees.—The management of the schools and the custody and care of all school property in every town devolves upon a superintending school committee, consisting of three members chosen by ballot at the annual town meeting, one each year, for terms of three years. Women are eligible. Vacancies are filled by the committee until the next town meeting. Committee serves without pay unless otherwise voted by the town, and no member can be employed in the same town as a teacher in the public school.

Duties of the committee are: To arrange for the examination of candidates

for positions as teachers in the town (who do not hold certificates from the State Superintendent or normal schools), giving three weeks' notice by newspaper or poster; to issue certificates to those found competent, and to employ teachers; to direct the general course of instruction, to select a uniform system of text-books, contract with publishers for the same, and make rules for their preservation; to make provision for instructing all pupils in physiology and hygiene with special reference to the effects of alcoholic drinks, stimulants, and narcotics; to dismiss any teacher who after due investigation is proven to be unfit; to expel any obstinately disobedient and disorderly scholar if found necessary after proper investigation, and to restore him on satisfactory evidence of his repentance; to exclude, if expedient, any person not vaccinated; to classify scholars and transfer them from school to school; to elect annually a superintendent of schools (not a member of the committee) who shall be ex officio secretary of the committee.

Superintendent of schools.—Duties: To inquire into the regulation and discipline of schools and the proficiency of scholars, for which purpose he shall visit each school at least twice each term; shall make (in April, corrected to April 1) a list of names and ages of all persons in the town from 4 to 21 years, except persons coming from other places to attend a college or academy or to engage in business; make all reports and returns required by law of superintending school committees; perform such other duties as the committee may direct. His salary is fixed by annual vote of the town, not less than \$2 a day when employed. Two or more towns may by vote unite to employ a superintendent (for a term not exceeding five years) the several school committees constituting a joint committee for such purpose. Each town's vote in said joint committee and share in the expense of such superintendence (the State pays one-half) is in proportion to the amount of service to be rendered by the superintendent to each. (See also Schools—Attendance.)

Truant officers.—Cities and towns must elect annually one or more truant officers, whose compensation is fixed by the municipal authorities; vacancies in the interim filled by the school committee. Truant officers shall inquire into cases of nonattendance and report causes to the school committee; arrest truants and take them to school; prosecute violators of attendance law when directed in writing by the school committee or superintendent; enforce the law against disturbing schools or defacing school property. A penalty of \$10 to \$50 is incurred by towns neglecting to elect truant officers and by truant officers neglecting to prosecute when directed.

2. TEACHERS.

Duties—Conventions—Normal schools—Certificates.

Duties.—To keep a school register of all scholars enrolled, age of each, date of his entering and leaving, and number of days he attended, length of school term, the teacher's wages, a list of text-books used, and all other facts required by the blank form furnished him; such register to be always open to inspection by the school committee and turned over to them at the close of the school; payment of teacher's salary is conditioned on the proper completion and delivery of said register. All teachers in public and private institutions are to use their best endeavors to impress on the minds of children and youth the principles of morality and justice, and a sacred regard for truth; love of country, humanity, and a universal benevolence; sobriety, industry, frugality, chastity, moderation, temperance, and all other virtues which ornament human society, and to lead those under their care, as their ages and capacities admit, into a particular understanding of the tendency of such virtues to preserve and perfect a republican constitution, secure the blessings of liberty, and promote their future happiness, and the tendency of the opposite vices to slavery, degradation, and ruin. Not less than ten minutes of each week must be devoted to teaching the principles of kindness to birds and animals. Certificates become invalid unless indorsed annually by the school committee. Whoever teaches without a certificate forfeits not exceeding the sum contracted for his wages and is barred from receiving pay therefor.

Conventions.—Thirty or more teachers or school officers of a county may organize for mutual improvement in teaching and for the encouragement of popular interest in education, and may hold conventions at least once a year under the supervision of the State superintendent, the State paying the necessary expenses of such conventions, for which a continuous annual appropriation

tion of \$1,000 is set aside from the school fund. No more than two such associations shall be formed in any county, and the expenses of no more than two conventions of any such association shall be defrayed by the State. Teachers may suspend their school not more than two days in any year to attend their county convention, also two days to attend a State teachers' convention approved by the State superintendent, without forfeiture of pay.

Normal schools (of which there are three in the State) shall be devoted to the training of teachers, including the common English branches in thorough reviews, specially selected higher branches, and the art of school management. Principals of normals keep a register (see Teachers—Duties), returning the same to the State superintendent by December 1 for his annual report. The course of study occupies two years; trustees may arrange a three or four years' course for students so desiring; terms of admission are arranged by the State superintendent, subject to the approval of the governor and council. Applicants must be at least 16 years of age if women, 17 if men, and must obligate themselves to teach in the State at least one year—two years if they receive a diploma. Tuition is without charge; incidental fee, \$1.50 per student. Said schools are under the direction of a board of seven trustees, consisting of the governor and State superintendent ex officio, with five others appointed (for three years) by the governor and confirmed by the council. These five receive each 10 cents per mile actually traveled and \$2 a day when employed.

Certificates.—(See Organization—Superintending school committees.)

3. SCHOOLS.

Attendance—Studies—Text-books—High schools—Manual-training schools—Normal schools—Buildings and grounds.

All schools of a town shall have an equal aggregate length of term, not less than twenty weeks per year. Superintending school committees may suspend schools having too few scholars; an average attendance of 8 is the minimum allowed by law for any school, unless maintained by special vote of the town. Adjoining towns may maintain union schools for parts of both towns, contributing to their support in proportion to the attendance from each, which schools shall be under the management of the school committee of the town wherein the building is located. Plantations have the same powers and liabilities as towns for electing school officers and for collecting and expending school funds. Cities and towns may establish evening schools for teaching the elementary branches only, to which shall be admitted persons of any age.

Attendance.—Children between 7 and 14 are required to attend public day school during the session. Necessary absence may be excused by the superintendent or school committee or by teachers under the authority of either. Instruction for a like time in an approved private school may be accepted as the equivalent, and children whose physical or mental condition makes attendance inexpedient may be excluded by the school committee. Persons having control of children are subject to a fine of \$25 or thirty days' imprisonment for every neglect of duty in securing children's attendance at school. When more convenient, children may attend in adjoining towns, the school committee of the town in which they reside compensating the other town therefor, or else such children shall pay as tuition the average expense per scholar of the school they attend. A child found truant may be arrested by a truant officer and taken to school; if absent six consecutive days without sufficient excuse, he may, after due proceedings, be committed to the State reform school, or in the case of a girl, to the State industrial school for girls, or to any truant school. Persons encouraging truancy are subject to a fine of \$20 or thirty days' imprisonment. When children reside such distance as in the judgment of the school committee renders it necessary, the superintendent must procure their conveyance to school or else pay their board at a suitable place near by. In unorganized townships similar authority is vested in the State superintendent.

Studies.—The studies to be taught are prescribed by the State superintendent the town committees having the right to add others. Studies specified by law (candidates for teachers' certificates to be examined in) are: Reading, spelling, English, grammar, geography, history, arithmetic, bookkeeping, civics, physiology, with special reference to the effects of alcoholic drinks and narcotics, and the elements of the natural sciences, especially as applied to agriculture. Cities or towns may make provision for free instruction in industrial or

mechanical drawing to persons over 15 years of age, either in day or evening schools. (See also High schools.)

Text-books, free.—School books, apparatus and appliances, including those for high schools, shall be provided at the expense of the town, under regulations made by the school committee for their distribution and care. The value of any such book or appliance lost, destroyed, or unnecessarily injured by a pupil whose parent or guardian does not, after due notification, make satisfaction therefor, is reported to the assessors and included in the next collection of town taxes. Text-books are uniform for all schools in the same town, and are selected and contracted for by the school committee, not to be changed within five years unless by a vote of the town.

High schools.—Not exceeding two free high schools in any town may be established (1) by any town, (2) by two or more adjoining towns uniting, (3) by any section of a town organizing a high school precinct, or (4) by sections of adjoining towns uniting to organize a high school precinct. Supervision of (1) is vested in the town school committee; (2) and (4) in a joint board composed of the towns' school committees; (3) in the town committee or State superintendent, as the precinct may elect. The State pays one-half the amount expended for instruction, not exceeding \$250 a year. Course of study: The ordinary English academic studies, especially the natural sciences in their application to mechanics, manufactures, and agriculture; ancient or modern languages or music not to be taught unless by direction of the school committee having supervision. Precinct high schools are open to scholars from without the precinct but within the town or towns in which the precinct is situated on payment of tuition equal to the cost of maintenance per scholar; and whenever a larger number can be accommodated without detriment, town or precinct high schools may admit scholars from without the town or towns interested upon payment of a like tuition. Instead of establishing a high school, a town may contract with the trustees of an academy within said town for the tuition of scholars in a like approved course of study, receiving in such case the same State aid.

Manual-training schools.—Cities and towns may also raise and appropriate money for the support of manual-training schools, which shall admit such persons (between 6 and 21) and give such courses of instruction as the local school board may determine.

Normal schools.—(See Teachers.)

Buildings and grounds.—The location for the erection or removal of school-houses and requisite buildings and for playgrounds shall be designated by vote of the town. When, after such designation, the owner refuses to sell, or asks an unreasonable price, or resides outside the State and has no authorized attorney or agent therein, not exceeding 3 acres may be acquired through appraisement proceedings; likewise additional ground desired for enlargement or extension of any location so designated, unless within 50 feet of a dwelling. If a minor defaces walls, benches, desks, or otherwise injures or destroys school property, the town may recover double the amount of damage in an action for debt against the parent or guardian. Defacement of walls, etc., by obscene pictures or language is punishable by a fine of \$10 on complaint made within one year. Willful disturbance or interruption of a school incurs a penalty of \$2 to \$20.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—All moneys received from sales of lands appropriated for the support of schools and from notes taken therefor, and any other moneys appropriated for the same purpose, constitute the permanent school fund, which shall be kept in a separate account by the State treasurer, and may be put at interest as the legislature directs. Six per cent of such fund, with all money received from the tax on banks, and one-half the annual tax paid by savings banks, is appropriated annually to the support of common schools, being distributed among towns in proportion to the number of children between the ages of 4 and 21. This apportionment is made immediately after July 1. The proportion due towns failing to make returns is based on the last apportionment, after deducting the number of children set off to other towns in a year, and one-tenth of the remainder. Each town is immediately notified of its proportion, which is not paid until its return is made to the State superintendent and all State taxes against such town are paid.

Taxation.—A tax of 1 mill on \$1 is annually assessed on all property in the State for the support of common schools, and distributed January 1 by the State treasurer to the towns, cities, and plantations on the basis of the previous year's returns; any of said fund not so apportioned or expended during the year is added to the permanent school fund. Each town shall annually raise and expend for schools not less than 80 cents per capita, exclusive of the income of any corporate school fund, or of any State grant, or of any donation or bequest, or of any forfeiture accruing to the use of schools, under penalty of forfeiting from two to four times the amount of its deficiency. Each town assessor shall, on or before May 1, report under oath to the State superintendent the following items: The amount voted by the town for common schools at the preceding annual meeting; amount of school money payable to the town by the State during the year preceding; the amount actually expended for common schools; the amount of school moneys unexpended; such other items (per blanks furnished by the State superintendent) as shall secure a complete statement of school revenues and expenditures. At the instance of the governor and council, the treasurer may withhold payments to towns suspected of evading the law, until satisfactory evidence is furnished to the contrary. (See also Schools—High schools, Manual training schools, Text-books.)

MARYLAND.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—County board—County examiner—District school trustees—Baltimore.

State board.—The governor, with the advice and consent of the senate, shall appoint at every regular session of the general assembly four persons (one a resident of the Eastern Shore) who, with the governor, principal of the State normal school, and State superintendent ex officio, shall constitute the State board of education. They shall meet on the last Wednesday in February, May, August, and November, and at such other times as occasion may require; their office shall be at the State normal school, Baltimore; they shall receive no compensation beyond actual expenses not to exceed \$1,000 per annum, including necessary clerical assistance. They shall have general supervision of public school interests, act as advisers of county boards, and issue circular letters to teachers and commissioners from time to time on school administration topics. Other duties are: To see that school laws are effective, instituting legal proceedings if need be, under the direction of the attorney-general; enact by-laws not at variance with law for the administration of the public school system, which, when published, shall have the force of law; suspend or remove any county examiner or teacher found inefficient, incompetent, or guilty of moral delinquency such as unfits him for his office; interpret the law and decide controversies that may arise thereunder; issue uniform series of blanks for use of teachers and county boards, according to which forms all accounts shall be kept and returns made; examine candidates for the office of county examiner when so requested by county boards, and give certificates of qualification; grant professional certificates to teachers of long experience and established reputation, which shall be valid until revoked for cause. The State board are ex officio trustees of the State normal school. By January 15 annually they shall make report to the governor setting forth school conditions in the State, a statement of the apportionment of moneys for support of schools, an abstract of reports received from county school commissioners, together with such suggestions for the advancement of school interests as the State board may deem expedient; which report the governor shall cause to be printed and distributed.

State superintendent.—The governor, with the advice and consent of the senate, shall appoint a superintendent of public instruction for the State for a term of four years, and may remove him for cause upon approval of two-thirds of State board. The superintendent is ex officio a member of the State board. His salary is fixed by said board, not to exceed \$3,000 per annum and \$500 for traveling expenses. It shall be his duty to inform himself and the State board as to the condition of the schools of the State, diffuse information as to best methods of instruction, present to the State board the reports of county boards, examine their expenditures and comment upon the same, remove county examiners for

cause after a hearing upon approval of two-thirds of State board, hold teachers' institutes in each county five days each year, print and distribute annually a teachers' manual of institute work, a programme for the proper observance of arbor day, proceedings of State teachers' association, and such other matter as will promote public education.

County board.—The governor, with the advice and consent of the senate if in session, shall appoint a board of county school commissioners in each county (none to be teachers employed as such). In the counties of Baltimore, Carroll, Frederick, Dorchester, and Washington such board shall consist of six persons; in other counties three. Two in counties named and one in other counties to be appointed every two years, to hold office six years; two in counties named and one in other counties to be appointed from the political party which cast next to the highest vote in the last preceding election for governor. The governor may remove for cause after an opportunity for a hearing. Each vacancy shall be filled from same political party as was the last preceding occupant. The commissioners shall elect a county examiner (which see) not a member of the board, who shall act also as its secretary and treasurer. In counties of more than 85 schools board may appoint an assistant examiner and fix his salary. The board shall meet at least once in every school term. Each commissioner shall receive \$4 a day while employed, not to exceed \$100 in any year. The board is a body corporate, in which is vested county school property, and each commissioner (and examiners and assistants) has authority to administer oaths relative to school matters. The commissioners shall have general supervision and control of schools, build, repair, and furnish schoolhouses, purchase and distribute text-books, divide county into suitable districts (none less than 4 miles square unless thinly settled), making each best accommodate population therein, considering most suitable sites for schoolhouses and the general features of the country; publish in November annually a statement of receipts and disbursements, including text-book account, and inclose copy of same in board's annual report (by October 1) to State board covering all matters affecting the educational interests of the county. (See also Schools—Buildings.)

County examiner.—Shall visit each school at least three times a year, or twice a year in counties having more than 50 schools, and each high school at least once each term; observe methods of teachers and give them such practical suggestions as circumstances prompt; attend public examinations (see Schools—Studies) when possible; report quarterly in detail to the county board the result of his observations. As secretary and treasurer of county board (see preceding paragraph) he is custodian of the county's school funds, and shall carefully keep all moneys and vouchers relating thereto, for the faithful performance of which he shall give bond in a sum to be determined by the board. He shall be present at all board meetings, may debate questions before them, but not vote, shall keep minutes, conduct correspondence, file and keep all letters and papers pertaining to board's business, and shall prepare for board's approval their annual report to State board of education. By January 15 each year he shall notify the comptroller how many months the schools of his county have been kept open. (See Schools—Scholastic periods; Finances—State tax.) He shall devote his whole time to public-school business, and receive such compensation as county board may direct. (See also Teachers—Certificates.)

District school trustees.—The board of county school commissioners annually on May 1 or at their first meeting thereafter shall appoint three persons in each district as school trustees, who shall have the care of schoolhouses, lands, furniture, apparatus, and other school property; make repairs, same to be paid for out of county school tax, amount to be expended having been first determined by the county board; employ teachers, subject to confirmation by the county board; exercise general supervision over schools of their district, visiting them frequently, and providing for ten months' instruction a year if possible; suspend or expel pupils for cause, from which action appeal may be taken to county board; see that every schoolhouse is provided with suitable outhouses. The county board may remove the trustees for neglect of duty. If found impossible to secure competent persons in any district to act as trustees, their duties shall devolve upon the county board.

Baltimore.—The mayor and city council of Baltimore shall have power to establish in said city a system of free public schools, and may delegate supervisory powers to a board of school commissioners. Said commissioners bear a general relation to the provisions of law similar to that of county school commissioners.

2. TEACHERS.

Certificates—Appointment and duties—Institutes—Associations—Training—Pensions.

Certificates.—No person shall be employed as teacher unless he holds a certificate from the county examiner or State board or a diploma from the State normal school. The county examiner shall examine candidates, in the presence of at least one member of the county or district board, and issue certificates (sanctioned by county board) to those found qualified, setting forth the branches that they are qualified to teach. No certificate shall be issued to any man under 19 or woman under 18 years of age, nor to any without satisfactory evidence of the moral character of the applicant. Applicants for second-grade certificates shall be examined in orthography, reading, writing, arithmetic, geography, history, English grammar [history and constitutions of Maryland and of the United States, physiology, algebra to quadratics, one book of plane geometry (Wentworth or equivalent), theory and practice of teaching, and the laws and by-laws of the Maryland public school system]; ^a for first grade are added [general history, plane geometry, and algebra complete,]^a bookkeeping and natural philosophy. Probationary certificates shall be issued good for six months; but when the examiner shall satisfy himself of such teacher's fitness to govern a school and ability to impart instruction in the various branches he may issue a certificate which shall continue in force for five years. County school commissioners may annul certificates for cause after due notice and opportunity for hearing, from whose action appeal may be taken to State board. Any person who has taught seven years (five of which in Maryland) and holds a first-grade certificate or the diploma of a respectable college or State normal school may apply to the State board for a life certificate, which, however, if granted, may be annulled by said board for cause. Examiners shall not, under penalty of dismissal, charge fees for conducting examinations.

Appointment and duties.—Teachers shall be appointed by the board of district school trustees, subject to confirmation by the county school commissioners. The trustees may remove, at any time they think proper, after thirty days' notice in writing, but shall furnish in writing, when requested by such teacher, the reasons for dismissal, and the teacher may appeal to the county board. Teachers shall make to the county board quarterly reports of attendance, textbooks used, branches taught, and other statistics required, and shall not be entitled to pay until such report shall be so made. County school commissioners fix teachers' salaries.

Institutes.—Teachers' institutes shall be held in each county five days each year; place to be determined by the president of the county board, the time by the principal of the State normal, the county examiner to notify teachers of time and place. Institutes designed as temporary normal schools shall be presided over by the principal or one of the professors of the State normal, assisted by the county examiner and any member of the county board who may choose to be present.

Associations.—District, county, and State teachers' associations are recommended as important means of elevating the standard of public education by mutual conference, interchange of views, and suggestions as to systems of teaching and discipline. The county examiner shall aid in the organization of such associations, encourage attendance, secure competent lecturers, and impart such information as will stimulate teachers in their work and better fit them for their duties. Teachers' associations may occupy schoolhouses. The Maryland State Teachers' Association is an incorporated body, with power to organize and direct reading circles; to members completing the course of study covering one, two, or three years certificates are issued setting forth the respective facts; to such members as shall satisfactorily complete the full four-year course the association may grant the honorary degree of master of the science of teaching; to teachers of learning, merit, and acknowledged professional skill the association may, with the advice and consent of the State board of education, grant the honorary degree of doctor of pedagogy.

Training.—(See Schools—Normal.)

Pensions.—Whenever any person has taught twenty-five years in the public or normal schools of the State, has a record without reproach, has reached the

^a Added by the State board under the law providing "But the State board of education may add further requirements * * * whenever the same may seem necessary."

age of 60 years, and by reason of physical or mental infirmity is unable to teach longer, he may lay his case before the State board of education, who, after due investigation, may place such teacher's name upon the teachers' retired list. Every person so placed upon said list shall be entitled to receive from the State a pension of \$200 per annum, payable quarterly, for which purpose there is a standing appropriation of \$10,000 a year.

3. SCHOOLS.

Miscellaneous provisions—Attendance—Scholastic periods—Studies—Text-books—Buildings and grounds—High schools—Manual-training schools—Schools for colored children—Normal schools.

Miscellaneous provisions.—Whenever the average attendance of a school is more than 40 an assistant may be employed, and for every additional 40 another teacher may be appointed, dividing pupils so as to form a graded school; whenever attendance exceeds 100, county board and trustees may establish schools of different grades or divide the district. Whenever the average attendance for two consecutive terms is less than 10 (7 in Allegany County), the county board may close the school, or else the trustees may keep the school open in part at the expense of the district, and shall receive their proportion of the school fund for said school, rating a full attendance of 20 scholars. Any person who shall be convicted of disturbing any public school in session shall incur a fine of \$20 (payable to the trustees for benefit of the school district) or imprisonment not exceeding thirty days, or both.

Attendance.—All white youths (see Schools for colored children) between the ages of 6 and 21 shall be admitted into the public schools. Where there are graded schools the teachers and trustees shall determine which school pupils may attend. Children living remote from the school of their own district may attend in an adjoining district by consent of both school boards. Schools on or near county lines shall be free to children from either county and be maintained jointly by both county boards. (See also preceding paragraph.)

Scholastic periods.—The school year is divided into four terms—fall, winter, spring, and summer. Times of beginning and closing each term shall be regulated by the county board, so as to aggregate ten months of school each year if possible. (See Finances—State tax.) Schools shall be kept open six hours each week day, except Saturday, during such hours as may be determined by the several county boards. The school fiscal year ends July 31.

Studies.—In every school shall be taught orthography, reading, writing, English grammar, geography, arithmetic, history and constitutions of the United States and Maryland, civil government, good behavior, algebra, bookkeeping, natural philosophy, vocal music, drawing, physiology, the laws of health, and domestic economy. The elements of agricultural science may be added by the State board. County boards may cause German to be taught in districts of large German population. In connection with physiology and hygiene special instructions shall be given as to the nature and effects of alcoholic drinks and narcotics. Public examinations shall be held in each school twice a year, of which due notice shall be given, that parents and others may attend. (See also Teachers—Certificates.)

Text-books.—Boards of county school commissioners shall adopt text-books, purchase, after inviting competition, and loan them to pupils without charge under proper regulations for their care. Change to free books to be made gradually as new books are needed, beginning with first grade; no board being required to expend more for such books than the county's pro rata of a standing appropriation of \$150,000 a year: *Provided*, That indigent pupils in all grades shall receive free books. Parents or pupils who desire may purchase their own books. Any book or series may be changed at the option of the county board. County boards shall report annually to State board the title, publisher, and net cost of each book so purchased, which information shall appear in State board's annual report. No book shall contain anything of a sectarian or partisan character.

Buildings and grounds.—The boards of county school commissioners shall select sites for location or change of schoolhouses. They may receive donations of such sites, or of houses already built adapted to school purposes or suitably located, or may purchase same. Where property proves unsuited for school purposes board may sell or lease it and apply proceeds to purchase or lease of

property more suitable. If the county board be unable to agree with owners for purchase of lands for location or enlargement of schoolhouse lots, condemnation proceedings may be instituted for same, not to exceed a total area of 1 acre. Schoolhouses shall be built and furnished according to plans issued from office of county board. Shall not be used for other than school purposes except by consent of said board. District trustees shall see that every schoolhouse is provided with suitable outbuildings. In Washington County no bituminous coal other than lump shall be used, except in a furnace or other heating system wherein coal is burned outside of schoolroom.

High schools.—A district, one or more contiguous districts, or a county, may establish a high school, which, after the building has been provided, shall be maintained by the county board, and teachers' salaries be paid out of the general school fund. If a high school be established by a district or districts, the county board of school commissioners shall appoint three persons who shall constitute a board of high school commissioners and exercise over such school the authority of district school trustees (which see, under Organization); but high schools established by counties shall be under the direct control of the county board. Each high school shall be visited annually by the principal or a professor of the State normal school, and at least once each term by the county examiner. Military tactics may, if practicable, form a department in high schools. (See also Manual training schools.)

Manual training schools.—When a suitable building or room or rooms connected with one or more of the large graded or high schools shall be provided by the county, the board of school commissioners may accept the same and provide for the maintenance of a manual training school or department. When the establishment of a manual training school has been reported to the State board they shall appoint the principal or a teacher of the State normal school to visit the same and give a certificate of approval, upon which certificate the State shall pay toward the maintenance of such school \$50 annually per scholar in average daily attendance, not to exceed \$1,500 a year to any county. By August 20 each year the county board shall report to the comptroller the condition of such schools, number of instructors, and number of pupils enrolled. The State superintendent shall provide an outline for, supervise, and inspect the work done at such schools, and certify to the comptroller by August 20 annually such as have complied with requirements and are entitled to appropriations for the ensuing year, and how much; he shall also report to State board all matters pertaining to manual training in such counties.

Schools for colored children.—Shall be established in each district affording an average attendance of not less than 15, under direction of a special board of trustees appointed by county board, and subject to same general laws as schools for white children. Appropriations for colored schools shall be apportioned per population between 5 and 20 years; taxes paid for school purposes by colored people of any county shall be devoted to said schools therein. Industrial schools for colored may be established and maintained under like provisions as for white youths. (See Manual training schools.)

Normal schools.—There shall be located in Baltimore (another at Frostburg) a State normal school for the instruction and practice of teachers in the science of education, the art of teaching, and the mode of governing schools. It shall be under the control of the State board of education, who shall appoint a principal (at \$2,500 per annum) and as many teachers and at such salaries as the board may determine, prescribe courses of study, and fix the length of session at not less than nine months in each year. Free scholarships (including use of books) shall be apportioned by State board according to representation in general assembly, students to be selected by the several county boards; applicants shall procure certificate of the county examiner or city superintendent as to their scholastic proficiency, and shall signify in writing their purpose to engage in teaching within the State, upon failure to fulfill which condition they shall forfeit \$30 for each session they may have attended the normal school, to be collected as other debts. The number of such students sent by the State shall not exceed 200, in addition to whom, in the ratio to them of 1 to 2 and until all vacancies in the school have been filled, there may be admitted other persons having the requisite qualifications, who shall pay \$25 per session and purchase their own text-books. The State board shall make provision for model and experimental primary and grammar schools, in which normal school students shall have opportunity to practice best modes of instruction and discipline. Salaries of teachers in such model schools shall be paid in part from tuition fees derived from pupils attending same.

4. FINANCES.

State tax—County tax.

State tax.—A State tax of 10 cents on each \$100 of taxable property throughout the State shall be levied annually for the support of the free public schools, and be collected at the same time and by same agents as the general State levy. On the 1st day of January and October and the 15th day of March and June the treasurer shall pay to the counties the amount to which each is entitled according to population from 5 to 20 years of age. But if in any county the schools have been kept open less than seven and a half months of the year ended December 31, the March installment of State school tax shall be withheld. (See also Schools—Scholastic periods; Organization—County examiner, District school trustees.)

County tax.—If, in apportioning the State school tax among the several counties, the share of any county shall prove inadequate to pay the salaries of teachers therein and provide school books and stationery for the children, then the county commissioners of such county are required to levy and collect such a tax upon the assessable property therein as the board of county school commissioners shall designate as sufficient to make good the deficiency, not to exceed 10 cents on \$100 unless the county commissioners shall sanction an additional tax. Moneys collected in any district by special taxation for school purposes shall be used only for the purposes originally intended. (See also Schools—Buildings and grounds.)

MASSACHUSETTS.

1. ORGANIZATION OF THE SYSTEM.

State board of education—Secretary of the State board of education—Agents of the State board of education—Commissioners of the State school fund—Town school committee—Town superintendent—Truant officer.

State board of education.—The board of education shall consist of the governor and lieutenant-governor, ex officio, and eight other persons, one of whom shall annually in May be appointed by the governor, with the advice and consent of the council, for a term of eight years. The board may annually expend not more than \$2,300 for clerical and messenger service, which, with the incidental expenses of the board and the expenses of the members thereof incurred in the performance of their official duties, shall be paid by the Commonwealth. The board may take and hold, in trust for the Commonwealth, a grant or devise of land, or a gift or bequest of money or other personal property made to it for educational purposes; and shall forthwith pay it over or deliver it to the treasurer and receiver-general, who shall invest such money in the name of the Commonwealth and, on the warrant of the governor, pay to the board the income or principal thereof, as it shall require; but no disposition shall be made of any gift, bequest, or devise which is inconsistent with its conditions or terms. The State board of education shall prescribe the form of census, of registers to be kept in the public schools, and of returns to be made by school committees; shall annually make to the general court a report containing a printed abstract of said returns and a detailed report of all the doings of the board, with observations upon the condition and efficiency of the system of public education and suggestions in regard to the most practicable means of improving and extending it. The board shall have the general management of the State normal schools and the boarding houses connected therewith, and money appropriated for their maintenance may be expended under its direction.

Secretary of the board of education.—The board may appoint a secretary, who, under its direction, shall make the abstract of school returns required by law, shall collect and distribute information respecting the condition and efficiency of the public schools and other means of popular education, and the best system of studies and the best method of instruction; shall suggest improvements in the present system of public schools to the board and to the general court; shall visit, as often as his other duties will permit, different parts of the Commonwealth for the purpose of arousing and guiding public sentiment in relation to the practical interests of education; shall collect in his office such school books, apparatus, maps and charts as can be obtained without expense to

the Commonwealth; shall receive and arrange in his office the reports and returns of the school committees; and shall receive, preserve or distribute the State documents relative to the public school system. He may also publish for general distribution such parts of the annual report of the board and such other matters as he may consider best adapted to promote the interests of public school education, if the expense thereof is paid out of the appropriation for the incidental and contingent expenses of the board and does not in any one year exceed \$500. He shall, under the direction of the board, give sufficient notice of and attend such meetings of teachers of public schools, of members of the school committees of the several towns, and of friends of education generally in any county as may assemble at the time and place designated by the board; and shall at such meetings devote himself to collecting information relative to the condition of the public schools of such county, the fulfillment of their duties by the school committees of all the cities and towns, and the condition of the towns in regard to teachers, pupils, books, apparatus, and methods of education, with a view to enabling him to furnish all information desired for the annual report. He shall receive an annual salary of \$4,000, and \$500 for traveling expenses, which shall be paid from the half of the school fund applicable to educational expenses. The incidental and other necessary expenses of his office shall be paid by the Commonwealth.

Agents of the board of education.—The board may appoint agents to visit the cities and towns for the purpose of inquiring into the condition of the schools, of conferring with teachers and committees, of lecturing upon subjects connected with education, and in general of giving and receiving information upon such subjects in the same manner as the secretary.

Commissioners of the fund.—(See Finances—Funds, permanent or special.)

Superintendent of public schools.—The school committee of a city or town which is not within an existing union for the employment of a superintendent shall, at the expense of the city or town, employ a superintendent of schools, who, under the direction and control of the committee, shall have the care and supervision of the public schools. The compensation of the superintendent shall not be less than \$1.50 for each day of actual service, and shall be determined by the school committee.

Two or more towns may, by a vote of each, form a district for the purpose of employing a superintendent of public schools therein.

Such superintendent shall be annually appointed by a joint committee composed of the chairman and secretary of the school committee of each of the towns in said district, who shall determine the relative amount of service to be performed by him in each town, fix his salary, apportion the amount thereof to be paid by the several towns, and certify the same to each town treasurer.

The school committees of two or more towns the valuation of each of which is less than \$2,500,000 and the aggregate number of schools in all of which is not more than 50 nor less than 25, and the school committee of four or more towns the valuation of each of which does not exceed \$2,500,000, without reference to the minimum limit in the aggregate number of schools aforesaid, shall form a union for the purpose of employing a superintendent of schools. Such union shall not be dissolved for three years after the date of its formation, except by a vote of a majority of the towns constituting the union, nor shall it be dissolved for the reason that the valuation of any one of the towns shall have so increased as to exceed \$2,500,000, nor for the reason that the number of schools shall have increased beyond 50 or, in a union of less than four towns, shall have decreased below 25.

The school committees of such towns shall be a joint committee, which, for the purposes of such union, shall be the agents of each town therein. The joint committee shall annually, in April, meet at a day and place agreed upon by the chairmen of the committees of the several towns comprising the union, and shall organize by the choice of a chairman and secretary. They shall choose, by ballot, a superintendent of schools, determine the relative amount of service to be performed by him in each town, fix his salary, apportion the amount thereof to be paid by the several towns, and certify it to each town treasurer.

When the chairman and secretary of such joint committee certify to the auditor of accounts, under oath, that a union has been effected, that the towns, in addition to an amount equal to the average of the total amount paid, or to the amount paid for each child, by the several towns for schools during the three years then last preceding, unitedly have appropriated and raised by taxation not less than \$750 for the support of a superintendent of schools, and that

a superintendent of schools has been employed for one year, a warrant shall, upon the approval of the certificate by the board of education, be drawn upon the treasurer and receiver-general for the payment of \$1,250, three-fifths of which shall be paid for the salary of such superintendent, and two-fifths thereof shall be apportioned and distributed to the towns forming such union on the basis of the amount appropriated and expended for a superintendent in such towns for the preceding year and shall be paid for the salaries of teachers employed in the public schools therein.

There shall be annually appropriated by the Commonwealth such amount as may be necessary to carry out the provisions relating to union superintendencies. Towns whose valuation exceeds \$2,500,000 may participate in a union in the same manner, and subject to the same terms, conditions, and benefits as towns having such limited valuation, except that the allowance by the Commonwealth in aid of said union shall not be made to the entire union, but shall first be apportioned to the several towns upon the basis of the amount appropriated by them respectively for the support of a superintendent of schools for the preceding year, and the warrant upon the treasurer and receiver-general shall then be drawn in favor of and only for the portions so assigned to those towns of the union whose valuation at the time of said union did not exceed the limit provided, namely, \$2,500,000.

If the valuation of a town in a union superintendency shall so increase as to exceed \$3,500,000, such increase shall have the same effect as if the valuation of said town had exceeded \$2,500,000 at the date of the formation of such union.

The State board of education is authorized to form or readjust unions of towns for the employment of superintendents of schools whenever in its judgment it becomes imperatively necessary to include a town which is otherwise unable to comply with the law. In carrying out the provisions of this act the board may allow the formation of unions with a number of schools less than 25, and in no case shall the readjustment deprive any town of its right to aid under the law.

Town school committee.—Every town shall at its annual meeting, or at a meeting held in the same month in which the annual town meeting occurs, choose members of the school committee, which committee shall consist of any number of persons divisible by three which said town has decided to elect, one-third thereof to be elected annually and to continue in office three years. If a town fails or neglects to choose such committee, an election at a subsequent meeting shall be valid, and the town may, at its annual meeting, vote to increase or diminish the number of its school committee; and any town in which ballots for town officers are provided at the expense of the town may vote so to change the number of its school committee at a meeting, other than the annual meeting, called for the purpose and held thirty days at least before the annual meeting at which such change is to become operative. Such increase shall be made by adding one or more to each class, to hold office according to the tenure of the class to which they are severally chosen. Such diminution shall be made by choosing annually such number as will in three years effect it, and a vote to diminish shall remain in force until the diminution under it is accomplished. Women shall be eligible to serve on the school committee. (By this section the school committee have general charge and superintendence of the schools, as the chief justice of the Commonwealth remarked from the bench upon the question regarding a sufficient number of schools: "There being no specific direction how schools shall be organized; how many schools shall be kept; what shall be the qualifications for admission to the schools; the age at which children may enter; the age to which they may continue—these must all be regulated by the committee under their power of general superintendence.") In towns which are in union superintendencies and which vote to authorize the school committee to receive compensation the members of the committee shall each be paid \$2.50 a day for the time actually occupied in performing the duties of the office, and such additional compensation as the town may allow. In other towns and in cities they shall receive no compensation.

Truant officers.—The school committee of every city and town shall appoint and fix the compensation of one or more truant officers, and shall make regulations for their government. Truant officers shall not receive fees for their services. The school committees of two or more cities or towns may employ the same truant officers.

Truant officers shall inquire into all cases of truancy, and may make complaints and serve legal processes. They shall have the oversight of children placed on probation, and may apprehend and take to school, without a warrant,

any truant or absentee found wandering about in the streets or public places thereof.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—The school committee shall select and contract with the teachers of the public schools, shall require full and satisfactory evidence of their moral character, and shall ascertain by personal examination their qualifications for teaching and their capacity for the government of schools; or in lieu thereof may accept the diplomas granted by the State normal schools of this Commonwealth to their graduates or the certificate issued by the State board of education

The State board of education shall, at convenient times and places designated by it, cause public examinations to be held of candidates for the position of teacher in the public schools. Such examinations shall test the professional as well as the scholastic abilities of candidates, and shall be conducted by the persons and in the manner designated by the board. Public notice of the time, place, and other conditions of the examinations shall be given in such manner as the board may determine.

A certificate of qualification shall be given to all candidates who pass satisfactory examinations in such branches as are required by law to be taught in the public schools and who in other respects fulfill the requirements of the board. Such certificate shall be either probationary or permanent, and shall indicate the grade of school in which the candidate is qualified to teach.

A list of approved candidates shall be kept in the office of the secretary of the board, and copies thereof, with such information as may be desired, shall be sent to school committees at their request

An amount not exceeding \$500 may be annually expended in carrying out the provisions of the three preceding sections. Every teacher shall, before he opens any public school, obtain from the school committee a certificate in duplicate of his qualifications, one of which shall be deposited with the selectmen, or, in a city, with the auditor or treasurer or with any officer who may be prescribed in the charter, before any payment is made to him on account of his services, and upon so filing such certificate he shall be entitled to receive, on demand, his wages due at the expiration of any quarter, or term longer or shorter than a quarter, or upon the close of any single term of service, subject to the following provision: No teacher of a public school shall receive payment for services for the two weeks preceding the close of any term until the register, properly filled up and completed, is so returned.

Preliminary training.—[The board of education by vote May 6, 1880, stated the design of the normal schools to be as follows: "The design of the normal schools is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing, and teaching the public schools of the Commonwealth. To this end there must be the most thorough knowledge of the branches of learning required to be taught in the schools, of the best methods of teaching those branches, of right mental training." The time required for the completion of the elementary course in the State normal schools depends upon the students. It may not exceed two years for those of satisfactory preparation and superior ability; for others three years are needed to do the work properly. In many cases more than two years are insisted upon. A diploma is given when the course is satisfactorily completed. The board of visitors (composed of members of the State board of education) and the principal of any normal school may arrange for its students a third year of study and of practice in teaching whenever, in their judgment, such action is desirable. The object is a more complete mastery of the topics arranged for the regular two years' course, as well as further experience in teaching. There is a four years' course provided for, which includes two years' work in the subjects of the elementary course and two years' work in the languages and advanced English studies. It is a distinct course from the beginning.]

Institutes and meetings.—If 25 teachers of public schools in at least three contiguous towns desire to form a teachers' institute, the board of education shall, by a committee, by its secretary, or in case of his inability by such person as it may delegate, appoint a time and place for such meeting and make suitable arrangements therefor.

An amount not exceeding \$3,000 may annually be paid from the treasury

of the Commonwealth to defray the necessary expenses and charges and to procure teachers and lecturers for such institutes.

The board of education may determine the length of the session of such institute and may apply not more than \$350 to meet the expenses thereof. If a county association of teachers and others holds an annual meeting of not less than one day for the express purpose of promoting the interests of public schools, it shall, upon filing with the governor a certificate under oath of its president and secretary that a meeting had been so held, receive \$25 from the Commonwealth.

If the Dukes County Educational Association holds an annual meeting of not less than three days for the express purpose of promoting the interests of the public schools, it shall, upon filing with the governor a certificate of the president and secretary of such association, under oath, that an annual meeting has been held in accordance with the provisions of this section, receive \$50 from the Commonwealth. Subject to the approval of the board of education, \$300 shall annually be allowed and paid from the treasury of the Commonwealth to the president or treasurer of the Massachusetts Teachers' Association, to be applied to the purposes of said association.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings—Nautical training school.

Attendance.—Every child between 7 and 14 years of age shall attend some public day school in the city or town in which he resides during the entire time the public day schools are in session, subject to such exceptions as to children, places of attendance, and schools as are provided for hereinafter. The superintendent of schools or, if there is no superintendent of schools, the school committee, or teachers acting under authority of said superintendent or committee, may excuse cases of necessary absence. The attendance of a child upon a public day school shall not be required if he has attended for a like period of time a private day school approved by the school committee of such city or town in accordance with the provisions of the following section, or if he has been otherwise instructed for a like period of time in the branches of learning required by law to be taught in the public schools, or if he has already acquired such branches of learning, or if his physical or mental condition is such as to render such attendance inexpedient or impracticable. Every person having under his control a child as described herein shall cause him to attend school as herein required; and if he fails for five day sessions or ten half-day sessions within any period of six months while under such control to cause such child, whose physical or mental condition is not such as to render his attendance at school harmful or impracticable, so to attend school, he shall, upon complaint by a truant officer and conviction thereof, be punished by a fine of not more than \$20. Whoever induces or attempts to induce a child to absent himself unlawfully from school or employs or harbors a child who, while school is in session, is absent unlawfully from school, shall be punished by a fine of not more than \$50.

For the purposes of the preceding section school committees shall approve a private school only when the instruction in all the studies required by law is in the English language, and when they are satisfied that such instruction equals in thoroughness and efficiency and in the progress made therein the instruction in the public schools in the same city or town; but they shall not refuse to approve a private school on account of the religious teaching therein.

Every child shall have the right to attend the public schools in the city or town in which his parent or guardian has a legal residence or in which the child himself actually resides, subject to such reasonable regulations as to the numbers and qualifications of pupils to be admitted to the respective schools and as to other school matters as the school committee shall from time to time prescribe. No child shall be excluded from a public school of any city or town on account of race, color, or religion. If a child resides in a city or town other than that of the legal residence of his parent or guardian for the sole purpose of there attending school, his parent or guardian shall be liable to said city or town for his tuition while attending school in said city or town to an amount equal to the average expense of such school for each pupil during the preceding year, for a period equal to the time during which the child so attends, unless the city or town in which the parent or guardian resides is required to pay for said tuition.

For the tuition in the public schools in any city or town of a child between the ages of 5 and 15 years who shall be placed elsewhere than in his own home by the State board of charity, or by the trustees of the Lyman and industrial schools, or kept under the control of either of said boards in said city or town, the Commonwealth shall pay to said city or town, and for such tuition of any such child so placed by the trustees for children of the city of Boston, or so kept under the control of said trustees, the city of Boston from its appropriation for school purposes shall pay to said city or town, 50 cents for each week of five days, or major part thereof, of attendance of every such child in the public schools. For the transportation to and from a public school of any child whose tuition is payable by the Commonwealth or by the city of Boston under the provisions of this section the Commonwealth or the city of Boston, as the case may be, shall pay to the city or town furnishing such transportation, for each week of five days, or major part thereof, an amount equal to the average amount for each child paid by said city or town per week for the transportation of children to and from school over the route by which such child is conveyed. Settlements of the accounts of the several cities and towns with the Commonwealth and with the city of Boston shall be made annually on the 1st day of April, and the amounts found due shall be paid within three months thereafter. The money received by said cities and towns under the provisions of this section shall be applied to the support of schools. For the tuition in the public schools in any town of less than 10,000 inhabitants of any child between the ages of 5 and 15 years not theretofore resident in such town, who is an inmate of an institution containing more than six inmates, said town may recover from said institution the extra school expense incurred, as may be determined jointly by the school committee of said town and the trustees or managers of said institution, or, in case of disagreement between said school committee and said trustees or managers, as may be decreed by the probate court; but no demand shall be made upon said trustees or managers without a vote of the town instructing the school committee to that effect.

Any child, with the consent of the school committee of the city or town in which he resides, may attend, at the expense of said city or town, the public schools of another city or town, upon such terms as may be satisfactory to the school committees of the cities or towns in interest.

A child who has not been vaccinated shall not be admitted to a public school except upon presentation of a certificate signed by a regular practicing physician that he is not a fit subject for vaccination. A child who is a member of a household in which a person is ill with smallpox, diphtheria, scarlet fever, or measles, or of a household exposed to such contagion from another household as aforesaid, shall not attend any public school during such illness or until the teacher of the school has been furnished with a certificate from the board of health of the city or town, or from the attending physician of such person, stating that, in a case of smallpox, diphtheria, or scarlet fever, at least two weeks, and in a case of measles, at least three days, have elapsed since the recovery, removal, or death of such person, and that danger of conveying such disease by such child has passed.

The parent, guardian, or custodian of a child who has been refused admission to or excluded from the public schools shall on application therefor be furnished by the school committee with a statement in writing of the reasons for the exclusion. After a statement has been so furnished a child who has been so refused admission to or excluded from said schools may recover damages from the city or town in an action of tort for unlawful exclusion, and may examine any member of the school committee or any other officer of the defendant city or town, upon interrogatories, as if he were a party to the action.

A school committee shall not permanently exclude a pupil from the public schools for alleged misconduct without first giving him an opportunity to be heard.

The county commissioners of each county, except the counties of Barnstable, Berkshire, Dukes County, and Nantucket, shall maintain either separately or jointly with the commissioners of other counties as hereinafter provided, in a suitable place, not at or near a penal institution, a truant school for the instruction and training of children committed thereto as habitual truants, absentees or school offenders. The county commissioners of two or more counties may, at the expense of said counties, establish and maintain a union truant school which shall be organized and controlled by the chairmen of the county commissioners of said counties. The chairmen of the respective boards of county commissioners of the counties of Norfolk, Bristol, and Plymouth, having the man-

agement of the Norfolk, Bristol, and Plymouth union truant school, shall each be paid the sum of \$100 annually by said counties, respectively. The county commissioners of the counties of Barnstable, Berkshire, Dukes County, and Nantucket shall assign a truant school established by law as the place for the instruction and training of children committed within their respective counties as habitual truants, absentees or school offenders, and shall pay for their support in said school such reasonable sum as the county commissioners having control of said school may determine. For the purposes of this chapter the parental school of the city of Boston shall be deemed the county truant school of the county of Suffolk, and commitments from the towns of Revere and Winthrop and the city of Chelsea shall be to the truant school for the county of Middlesex. The city or town from which an habitual truant, absentee, or school offender is committed to a county truant school shall pay to the county within which it is located \$1 a week toward his support; but the towns of Revere and Winthrop and the city of Chelsea shall pay to the county of Middlesex, for the support of each child committed to the truant school of said county, \$2.50 a week, and such additional sums for each child as shall cover the actual cost of maintenance.

County truant schools shall be subject to visitation by the board of education and by the State board of charity, and said boards shall report thereon annually to the general court.

A child between 7 and 14 years of age who willfully and habitually absents himself from school contrary to the provisions of law shall be deemed to be an habitual truant, and, upon complaint by a truant officer and conviction thereof, may, if a boy, be committed to a county truant school for not more than two years and, if a girl, to the State industrial school for girls, unless such child is placed on probation.

A child between 7 and 16 years of age who may be found wandering about in the streets or public places of any city or town, having no lawful occupation, habitually not attending school, and growing up in idleness and ignorance, shall be deemed to be an habitual absentee, and, upon complaint by a truant officer or any other person and conviction thereof, may, if a boy, be committed to a county truant school for not more than two years or to the Lyman school for boys, and, if a girl, to the State industrial school for girls, unless such child is placed on probation.

A child under 14 years of age who persistently violates the reasonable regulations of the school which he attends, or otherwise persistently misbehaves therein, so as to render himself a fit subject for exclusion therefrom, shall be deemed to be an habitual school offender, and, upon complaint by a truant officer and conviction thereof, may, if a boy, be committed to a county truant school for not more than two years or to the Lyman school for boys, and, if a girl, to the State industrial school for girls, unless such child is placed on probation.

The court or magistrate by whom a child has been committed to a county truant school may make an order relative to the payment by his parents to the county of the cost of his support while in said school, and may from time to time revise and alter such order or make a new order, as the circumstances of the parents may justify.

A court or magistrate by whom a child has been convicted of an offense under the provisions of this chapter may place such child on probation under the oversight of a truant officer of the city or town in which the child resides, or of a probation officer of said court, for such period and upon such conditions as said court or magistrate may deem best; and if, within such period, the child violates the conditions of his probation, such truant officer or probation officer may, without warrant or other process, take the child before the court, and the court may thereupon sentence him or may make any other lawful disposition of the case.

County commissioners, if they think it will be for the best interest for any child who has been committed to a county truant school under their control, after notice and an opportunity to be heard has been given to the superintendent of schools, or, if there is no superintendent, to the school committee of the city or town from which such child was committed to said school, may permit him to be at liberty upon such conditions as said commissioners may deem best; or, with the approval of the court which imposed the sentence, they may discharge him from said school; and upon such parole or discharge they shall make an entry upon their records of the name of such child, the date of parole or discharge, and the reason therefor; and a copy of such record shall be transmitted to the court or magistrate by whom such child was committed and to

the school committee of the city or town from which he was committed. If such child, in the opinion of said commissioners, violates the conditions of his parole at any time previous to the expiration of the term for which he was committed to said school, such parole may be revoked. If a superintendent of schools or a school committee furnishes evidence satisfactory to said commissioners of the violation by a child of the conditions of his parole, said commissioners shall revoke such parole, and may thereupon issue an order directed to the truant or police officers of any city or town to arrest such child wherever found and return him to said school. Such officer shall arrest such child and return him to said school, where he shall be held, subject to the provisions of this chapter, for the residue of the term of the original sentence. The expense of such arrest and return, so far as approved by the commissioners, shall be paid by the county or counties maintaining said school. Releases from the parental school of the city of Boston shall be governed by the provisions of chapter 514 of the acts of the year 1896, and shall be made by the trustees for children who shall have and exercise the powers given by said chapter to the institutions commissioner of said city.

If a near relation of a child who is confined on a sentence as an habitual truant, habitual absentee, or habitual school offender dies or is seriously ill, a court or trial justice which has jurisdiction of such offenses may order such child to be released for a specified time, either with or without the custody of the superintendent or other officer, and may revoke, extend, or otherwise modify such order. The expenses incurred in serving such order shall be approved and paid in the same manner as other expenses of the institution in which the child is confined.

An inmate of a county truant school or of the parental school of the city of Boston who persistently violates the reasonable regulations thereof, or is guilty of indecent or immoral conduct, or otherwise grossly misbehaves, so as to render himself an unfit subject for retention therein, may, upon complaint by the officer in control of said school and conviction thereof, if under 15 years of age, be committed to the Lyman school for boys; if over 15 years of age, to the Massachusetts reformatory.

Police, district, and municipal courts and trial justices shall have jurisdiction of offenses arising under the provisions of the law relating to school attendance and truancy. A summons or warrant issued by such court or justice may be served, at the discretion of the court or magistrate, by a truant officer or by any officer qualified to serve criminal process. Upon complaint against a child for any such offense the parents, guardian, or custodian of the child shall be notified. A child against whom complaint as an habitual absentee is brought by any other person than a truant officer shall not be committed until notice and an opportunity to be heard have been given to the State board of charity. No child under the age of 14 years shall be employed in any factory, workshop or mercantile establishment. No such child shall be employed at work performed for wages or other compensation, to whomsoever payable, during the hours when the public schools of the city or town in which he resides are in session, nor be employed at work before 6 o'clock in the morning or after 7 o'clock in the evening.

No child under 16 years of age shall be employed in a factory, workshop, or mercantile establishment unless his employer procures and keeps on file, accessible to the truant officers of the city or town, and to the district police and inspectors of factories and public buildings, an age and schooling certificate and keeps two complete lists of all such minors employed therein, one on file and one conspicuously posted near the principal entrance of the building in which such children are employed, and also keeps on file and sends to the superintendent of schools or, if there is no superintendent, to the school committee a complete list of the names of all minors employed therein who can not read at sight and write legibly simple sentences in the English language.

An age and schooling certificate shall be approved only by the superintendent of schools or by a person authorized by him in writing, or if there is no superintendent of schools, by a person authorized by the school committee; but no member of a school committee or other person authorized as aforesaid shall approve such certificate for any minor then in or about to enter his own employment or the employment of a firm or corporation of which he is a member, officer, or employee. The person who approves the certificate may administer the oath provided for therein, but no fee shall be charged therefor.

An age and schooling certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the certificate of birth or baptism of such minor, the register of birth of such minor with a city or town clerk, or in some other manner, that such minor is of the age stated in the certificate.

The age and schooling certificate of a minor under 16 years of age shall not be approved and signed until he presents to the person who is authorized to approve and sign it an employment ticket duly filled out and signed. A duplicate of each age and schooling certificate shall be filled out and shall be kept on file by the school committee. Any explanatory matter may, in the discretion of the school committee or superintendent of schools, be printed with such certificate. The employment ticket and the age and schooling certificate shall be separately printed, and shall be filled out, signed, and held or surrendered, as indicated in the following forms:

EMPLOYMENT TICKET, REVISED LAWS, c. 106, § 32.

When [name of minor] , height [feet and inches] , complexion [fair or dark], hair [color] , presents an age and schooling certificate duly signed, I intend to employ [him or her].

(Signature of intending employer or agent.)

(Town or city and date.)

AGE AND SCHOOLING CERTIFICATE, REVISED LAWS, c. 106, § 32.

This certifies that I am the [father, mother, guardian, or custodian] of [name of minor] , and that [he or she] was born at [name of city or town] , in the county of [name of county, if known] , and state [or country] of , on the [day and year of birth] , and is now [number of years and months] old.

(Signature of father, mother, guardian, or custodian.)

(City or town and date.)

Then personally appeared before me the above-named [name of person signing] , and made oath that the foregoing certificate by [him or her] signed is true to the best of [his or her] knowledge and belief. I hereby approve the foregoing certificate of [name of minor] , height [feet and inches] , complexion [fair or dark], hair [color] , having no sufficient reason to doubt that [he or she] is of the age therein certified. I hereby certify that [he or she] [can or cannot] read at sight and [can or cannot] write legibly simple sentences in the English language.

This certificate belongs to [name of minor in whose behalf it is drawn] , and is to be surrendered to [him or her] whenever [he or she] leaves the service of the corporation or employer holding the same; but if not claimed by said minor within thirty days from such time, it shall be returned to the superintendent of schools, or, if there is no superintendent of schools, to the school committee.

(Signature of person authorized to approve and sign, with official character or authority.)

(City or town and date.)

In the case of a minor who cannot read at sight and write legibly simple sentences in the English language, the certificate shall continue as follows, after the word "language":

I hereby certify that [he or she] is regularly attending the [name] public evening school. This certificate shall continue in force only so long as the regular attendance of said minor at the evening school is indorsed weekly by a teacher thereof.

Whoever, being authorized to sign the foregoing certificate, knowingly certifies to any materially false statement therein shall be punished by a fine of not more than \$50.

Whoever employs a minor under 16 years of age, and whoever having under his control a minor under such age permits such minor to be employed, in violation of the provisions of law, shall for such offense be punished by a fine of not more than \$50; and whoever continues to employ a minor in violation of the law, after being notified by a truant officer or an inspector of factories and public buildings thereof, shall for every day thereafter that such employment continues be punished by a fine of not less than \$5 nor more than \$20. A failure to produce to a truant officer or inspector of factories and public buildings an age and schooling certificate or list required by law shall be prima facie evidence of the illegal employment of any person whose age and schooling certificate is not produced or whose name is not so listed. A corporation or employer who retains an age and schooling certificate in violation of the provisions of said certificate shall be punished by a fine of \$10.

Truant officers may visit the factories, workshops, and mercantile establishments in their several cities and towns and ascertain whether any minors are

employed therein contrary to the provisions of this chapter, and shall report any cases of such illegal employment to the school committee and to the chief of the district police or to the inspector of factories and public buildings. Inspectors of factories and public buildings and truant officers may require that the age and schooling certificates and lists of minors who are employed in such factories, workshops, or mercantile establishments shall be produced for their inspection. Complaints for offenses under the provisions of this chapter shall be made by inspectors of factories and public buildings.

While a public evening school is maintained in the city or town in which any minor who is over 14 years of age and who does not have a certificate signed by the superintendent of schools, or by the school committee, or by some person acting under authority thereof, certifying to the minor's ability to read at sight and write legibly simple sentences in the English language resides, no person shall employ him, and no parent, guardian, or custodian shall permit him to be employed unless he is a regular attendant at such evening school or at a day school; but, upon presentation by such minor of a certificate signed by a registered practicing physician and satisfactory to the superintendent of schools, or, if there is no such superintendent, to the school committee, showing that his physical condition would render such attendance in addition to daily labor prejudicial to his health, said superintendent or school committee shall issue a permit authorizing the employment of such minor for such period as said superintendent or school committee may determine. Said superintendent or school committee, or teachers acting under authority thereof, may excuse any absence from such evening school which arises from justifiable cause. Any minor not holding the certificate described above shall furnish to his employer a record of his school attendance each week while the evening school is in session, and when this record shows unexcused absences from the sessions his attendance shall be deemed irregular according to this act. Whoever employs a minor in violation of the provisions of this section shall forfeit not more than \$100 for each offense to the use of the evening schools of such city or town. A parent, guardian, or custodian who permits a minor under his control to be employed in violation of the provisions of this section shall forfeit not more than \$20 to the use of the evening schools of such city or town.

No person shall employ, exhibit, sell, apprentice, or give away a child under 15 years of age for the purpose of employing or exhibiting him in dancing on the stage, playing on musical instruments, singing, walking on a wire or rope, or riding or performing as a gymnast, contortionist, or acrobat in a circus, theatrical exhibition, or in any public place, or cause, procure, or encourage such child to engage therein; but the provisions of this section shall not prevent the education of children in vocal and instrumental music or dancing, or their employment as musicians in a church, chapel, school, or school exhibition, or prevent their taking part in any festival, concert, or musical exhibition, upon the special written permission of the mayor and aldermen of a city or of the selectmen of a town. Whoever violates the provisions of this section shall be punished by a fine of not more than \$200 or by imprisonment for not more than six months.

A license shall not be granted for a theatrical exhibition or public show in which children under 15 years of age are employed as acrobats or contortionists or in any feats of gymnastics or equestrianism, or in which such children who belong to the public schools are employed or allowed to take part as performers on the stage in any capacity, or if, in the opinion of the board authorized to grant licenses, such children are employed in such a manner as to corrupt their morals or impair their health; but the provisions of this section shall not prevent the granting of special permission authorized by the preceding section.

If it appears to the judge of probate of any county that a minor under 14 years of age resident therein is without a guardian and is entirely abandoned, or is treated with gross and habitual cruelty by his parent or other person who has the care or custody of him, or that he is illegally deprived of his liberty, he may for such period as he sees fit appoint the Massachusetts Society for the Prevention of Cruelty to Children as his guardian, and may at any time, for good cause, revoke such appointment. Said society, upon such appointment, shall be entitled to the exclusive custody of said child, but shall not be entitled to the management of his property.

The parents, surviving parent, or guardian of a child under 14 years of age, if unable to support him, may by an agreement in writing, fixing the terms of the

custody, place him in the charge of said society, which shall thereupon have custody of him as provided in the preceding section.

A police, district or municipal court, or a trial justice, upon a complaint made by any person that any child under 16 years of age within its or his jurisdiction, by reason of orphanage or of neglect, crime, or drunkenness, or other vice of its parents, is growing up without education or without salutary control, or in circumstances exposing him to lead an idle and dissolute life, or is dependent upon public charity, may issue a precept to bring such child before said court or trial justice, and shall issue a notice to the State board of charity and shall also issue a summons requiring the board or person to whom such notice or summons is directed to appear before said court or trial justice at the time and place stated in the notice and summons, to show cause why such child should not be committed to the State board of charity, or be otherwise provided for.

Character of the instruction.—Every city and town shall maintain, for at least thirty-two weeks in each year, a sufficient number of schools for the instruction of all the children who may legally attend a public school therein, except that in towns whose assessed valuation is less than \$200,000 the required period may, with the consent of the board of education, be reduced to twenty-eight weeks. Such schools shall be taught by teachers of competent ability and good morals, and shall give instruction in orthography, reading, writing, the English language and grammar, geography, arithmetic, drawing, the history of the United States, physiology and hygiene, and good behavior. In each of the subjects of physiology and hygiene special instruction as to the effects of alcoholic drinks and of stimulants and narcotics on the human system shall be taught as a regular branch of study to all pupils in all schools which are supported wholly or partly by public money, except schools which are maintained solely for instruction in particular branches. Bookkeeping, algebra, geometry, one or more foreign languages, the elements of the natural sciences, kindergarten training, manual training, agriculture, sewing, cooking, vocal music, physical training, civil government, ethics, and such other subjects as the school committee consider expedient may be taught in the public schools.

A town of less than 500 families or householders in which a public high school or a public school of corresponding grade is not maintained shall pay for the tuition of any child who resides in said town and who, with the previous approval of the school committee of his town, attends the high school of another town or city. If such town neglects or refuses to pay for such tuition it shall be liable therefor to the parent or guardian of a child who has been furnished with such tuition if the parent or guardian has paid for the same, and otherwise to the city or town furnishing the same, in an action of contract. If the school committee of a town in which a public high school or public school of corresponding grade is not maintained refuses, upon the completion by a pupil resident therein of the course of study provided by it, to approve his attendance in the high school of some other city or town which he, in the opinion of the superintendent of schools of the town in which he is resident is qualified to enter, the town shall be liable in an action of contract for his tuition. A town whose valuation is less than \$750,000 shall be entitled to receive from the treasury of the Commonwealth all necessary amounts, and a town whose valuation exceeds \$750,000, but whose number of families is less than 500, shall be entitled to receive from the treasury of the Commonwealth half of all necessary amounts which have actually been expended for high school tuition under the provisions of this section: *Provided*, That such expenditure shall be certified under oath to the board of education by its school committee within thirty days after the date of such expenditure; but if a town of less than 500 families maintains a high school of its own of the character described in section 2 of this chapter and employs at least two teachers therein, it shall be entitled to receive annually from the treasury of the Commonwealth toward the support of such high school the sum of \$300. No town the valuation of which averages a larger sum for each pupil in the average membership of its public schools than the corresponding average for the Commonwealth shall receive money from the Commonwealth under the provisions of this section; and no expenditure shall be made by the Commonwealth on account of high school instruction under the provisions of this section unless the high school in which such instruction is furnished has been approved by the board of education.

A town of less than 500 families or householders in which a public high school or public school of corresponding grade is not maintained shall pay for the tuition of any child who resides in said town and who, with the previous approval of the school committee of his town attends the high school of another town or

city. If such town neglects or refuses to pay for such tuition, it shall be liable therefor to the parent or guardian of a child who has been furnished with such tuition if the parent or guardian has paid for the same, and otherwise to the city or town furnishing the same, in an action of contract. If the school committee of a town in which a public high school or public school of corresponding grade is not maintained refuses, upon the completion by a pupil resident therein of the course of study provided by it, to approve his attendance in the high school of some other city or town which he, in the opinion of the superintendent of schools of the town in which he is resident is qualified to enter, the town shall be liable in an action of contract for his tuition. A town whose valuation does not exceed \$500,000 shall be entitled to receive from the treasury of the Commonwealth all necessary amounts which have been actually expended for high school tuition under the provisions of this section, if such expenditure shall be certified under oath to the board of education by its school committee within thirty days after the date of such expenditure, and such high school shall have been approved by the board of education.

Two adjacent towns, each having less than 500 families or householders, may vote to form one high school district for establishing a high school.

The school committees of such towns shall elect one person from each of their respective boards, and the persons so elected shall form the committee for the management and control of such school, with all the powers of school committees.

Such committee shall determine the location of the schoolhouse, if one is authorized, to be built by the towns of such high school district; otherwise it shall authorize the location of such school alternately in the two towns.

The proportion to be paid by each town for the erection of a permanent schoolhouse for such school, for its support and maintenance, and for all incidental expenses attending the same, unless otherwise agreed, shall be according to its proportion of the county tax.

Two or more towns may severally vote to establish union schools for the accommodation of such contiguous portions of each as shall be mutually agreed upon. The management and control of such schools, the location of the same or of the schoolhouses therefor, and the apportionment of the expenses of erecting such schoolhouses, and of the support and maintenance of said schools, with all expenditures incident to the same, shall be governed by the provisions of the three preceding sections.

Every city and town containing 20,000 inhabitants or more shall maintain the teaching of manual training as part of both its elementary and its high school system.

A town may establish and maintain one or more industrial schools, and the school committee shall employ the teachers, prescribe the arts, trades, and occupations to be taught therein, and have the general control and management thereof; but it shall not expend for any such school an amount exceeding the appropriation specifically made therefor, nor compel a pupil to study any trade, art, or occupation without the consent of his parent or guardian. Attendance upon such school shall not take the place of the attendance upon public schools required by law.

Any town may, and every city or town of 10,000 or more inhabitants shall, maintain annually evening schools for the instruction of persons over 14 years of age in orthography, reading, writing, the English language and grammar, geography, arithmetic, industrial drawing, both free-hand and mechanical, the history of the United States, physiology and hygiene, and good behavior. Such other subjects may be taught in such schools as the school committee consider expedient.

Every city of 50,000 or more inhabitants shall maintain annually an evening high school, in which shall be taught such subjects as the school committee thereof consider expedient, if 50 or more residents, 14 years of age or over, who are competent, in the opinion of the school committee, to pursue high school studies shall petition in writing for an evening high school and certify that they desire to attend such school.

The school committee shall, two weeks next before the opening of each term of the evening schools, post in three or more public places of their city or town notice of the location of said schools, the date of the beginning of the term, the evenings of the week on which they shall be kept, such regulations as to attendance as they deem proper, and the provisions of the law relating to the attendance upon evening schools of illiterate minors over 14 years of age.

The school committee may employ competent persons to deliver lectures on the

natural sciences, history, and kindred subjects, and may provide cards or pamphlets giving the titles and authors of books of reference on the subject-matter of said lectures which are contained in the local public libraries.

The school committee of a city or town may establish and maintain schools to be kept open during the whole or any part of the summer vacation; but attendance thereon shall not be compulsory or be considered as a part of the school attendance required by law.

A town may establish and maintain, upon shore or upon vessels at the election of the school committee, one or more schools for training young men or boys in nautical duties; such schools shall be subject to the direction of the school committee under the law, except that the school committee may excuse boys attending such nautical schools from attendance on other schools.

In every public school having an average of 50 pupils one or more female assistants shall be employed unless the town votes otherwise.

The president, professors, and tutors of the university at Cambridge and of the several colleges, all preceptors and teachers of academies, and all other instructors of youth shall exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety and justice and a sacred regard for truth, love of their country, humanity and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornament of human society and the basis upon which a republican constitution is founded; and they shall endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues to preserve and perfect a republican constitution and secure the blessings of liberty as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices.

A portion of the Bible shall be read daily in the public schools, without written note or oral comment; but a pupil whose parent or guardian informs the teacher in writing that he has conscientious scruples against it shall not be required to read from any particular version or to take any personal part in the reading. The school committee shall not purchase or use schoolbooks in the public schools calculated to favor the tenets of any particular religious sect.

In all the public schools the last regular session, or a portion thereof, prior to the 30th day of May, known as Memorial Day, shall be devoted to patriotic exercises.

No person shall, in the presence of a pupil in any public school or of a minor there present, practice vivisection or exhibit an animal which has been vivisectioned. Dissection of dead animals or of any portions thereof in the public schools shall be confined to the class room and to the presence of pupils engaged in the study to be illustrated thereby and shall in no case be for the purpose of exhibition. Whoever violates the provisions of this section shall be punished by a fine of not less than \$10 nor more than \$50.

Text-books.—The school committee shall direct what books shall be used in the public schools, and shall prescribe, as far as is practicable, a course of studies and exercises to be pursued therein. Such exercises may, at the discretion of the committee, include calisthenics, gymnastics, and military drill; but no special instructors shall be employed therefor except by a two-thirds vote of the committee. No pupil shall be required to take part in any military exercise if he, his parent or guardian, notifies the committee that he or his parent or guardian has conscientious scruples against such exercise or believes that it would be injurious to his health. The school committee shall, at the expense of the town, purchase text-books and other school supplies used in the public schools, and, subject to such regulations as to their care and custody as it may prescribe, loan them to the pupils of such schools free of charge, and, if instruction is given therein in the use of tools and in cooking, may so purchase and loan the tools, implements, and materials necessary therefor.

In a city which, by vote of the board of aldermen, and in a town which, by vote of the inhabitants at an annual town meeting, accepts the provisions of this section or has accepted the corresponding provisions of earlier laws, the school committee shall make regulations with reference to the care, custody, and distribution of books and supplies so loaned, and may provide for the continued use of any text-books by such pupils throughout any grades. Such pupils may, if the school committee so votes, purchase from such city or town, at such time and place as the school committee designates, at not more than the cost price to such city or town, any text-books which are or are to be used by them in the public schools, and, if the committee so votes, pupils who complete two years

in any public school in grades more advanced than the fourth grade may, upon graduating from the grammar school and upon application to the school committee, be permitted to acquire the permanent ownership of such free textbooks used during the last year of their attendance in the school as they may select.

The school committee shall, at the expense of the town and in accordance with appropriations therefor previously made, procure apparatus, reference books, and other means of illustration.

A change may be made in the schoolbooks used in the public schools by a vote of two-thirds of the whole school committee at a meeting thereof, notice of such intended change having been given at a previous meeting.

Building.—Every town shall provide and maintain a sufficient number of schoolhouses properly furnished and conveniently located for the accommodation of all children therein who are entitled to attend the public schools. A town which for one year refuses or neglects to comply with the requirements of this section shall forfeit not less than \$500 nor more than \$1,000, to be paid and applied as provided in sections 23 and 24. The school committee, unless the town otherwise directs, shall have general charge and superintendence of the schoolhouses therein, shall keep them in good order, and shall procure a suitable place for the schools, if there is no schoolhouse, and provide fuel and all other things necessary for the comfort of the pupils therein at the expense of the town.

The school committee of every city and town shall provide for each schoolhouse in which public schools are maintained and which is not otherwise supplied, a United States flag of silk or bunting not less than 4 feet in length, and suitable apparatus whereby such flag may be displayed on the schoolhouse building or grounds every school day when the weather permits and on the inside of the schoolhouse on other school days.

A town may, at a meeting called for the purpose, determine the location of its schoolhouses, and adopt all necessary measures to purchase and procure land therefor. Whoever willfully and maliciously or wantonly and without cause destroys, defaces, mars, or injures a schoolhouse or any of its appurtenances shall be fined \$500 or imprisonment in the jail not exceeding one year.

Every public building and every schoolhouse shall be kept clean and free from effluvia arising from any drain, privy, or nuisance; shall be provided with a sufficient number of proper water-closets, earth closets, or privies, and shall be ventilated in such a manner that the air shall not become so impure as to be injurious to health. The provisions of this section shall be enforced by the inspection department of the district police. If it appears to an inspector of factories and public buildings that further or different sanitary or ventilating provisions, which can be provided without unreasonable expense, are required in any public building or schoolhouse, he may issue a written order to the proper person or authority, directing such sanitary or ventilating provisions to be provided. A school committee, public officer, or person who has charge of, owns, or leases any such public building or schoolhouse who neglects for four weeks to comply with the order of such inspector shall be punished by a fine of not more than \$100. Whoever is aggrieved by the order of an inspector, issued as above provided and relating to a public building or a schoolhouse, may, within thirty days after the date of the service thereof, apply in writing to the board of health of the city or town to set aside or amend the order, and thereupon the board, after notice to all parties interested, shall give a hearing upon such order and may alter, annul, or affirm it.

The nautical training school.—There shall be a board of commissioners of the Massachusetts Nautical Training School consisting of three citizens of the Commonwealth, one of whom shall annually, before the 1st day of July, be appointed by the governor, with the advice and consent of the council, for a term of three years from said 1st day of July. Said commissioners shall serve without compensation, but they shall be reimbursed by the Commonwealth for all expenses actually incurred by them in the performance of their official duties. They shall provide and maintain a nautical training school for the instruction and training of pupils in the science and practice of navigation, shall provide accommodations for the school on board a proper vessel, purchase and provide books, stationery, apparatus, and supplies needed in the work of the school, appoint and remove instructors and other necessary employees, determine their number and compensation, fix the terms and conditions upon which pupils shall be received and instructed in the school and be discharged or dismissed therefrom, establish all regulations necessary for its proper management, and shall from

time to time provide for cruises in or from the harbor of Boston. They may receive from the United States Government, and use for the accommodation of the school, such vessels as the Secretary of the Navy may detail. They may annually expend not more than \$50,000 which shall be paid by the Commonwealth; and they shall annually submit an estimate of the expense required in making cruises in or from the harbor of Boston, and the amount of said estimate, after approval by the governor and council and subject to the provisions of chapter 6, shall be advanced to the commanding officer of the vessel detailed therefor, who shall give a bond in the sum of \$10,000, with sureties approved by the governor and council, for its proper disbursement. Said advance shall not exceed \$10,000 for six months, and shall be accounted for by properly approved vouchers within thirty days after the termination of said cruises. They shall annually, in January, report to the general court a detailed statement of all moneys appropriated and expended during the preceding year for the nautical training school, stating the results of the work during such year and making any necessary recommendations.

4. FINANCES.

Funds (permanent or special)—Taxation.

The Massachusetts school fund.—The present school fund of the Commonwealth, such additions as may be made thereto, and any money received by the Commonwealth from the Government of the United States, the disposition of which is not otherwise provided for, shall constitute a permanent fund, to be called the "Massachusetts school fund." The principal thereof shall not be diminished, and the income shall be appropriated as hereinafter provided. The fund is now \$4,670,548.14, and \$100,000 shall annually be paid from the treasury of the Commonwealth into said fund, until the principal thereof amounts to \$5,000,000.

The secretary of the board of education and the treasurer and receiver-general shall be commissioners who shall invest and manage the fund, and report annually to the general court the condition and income thereof. The premiums on any securities purchased for said fund, to an amount not exceeding in any one year \$50,000, may be paid from any money in the treasury of the Commonwealth not otherwise appropriated. All investments shall be made with the approval of the governor and council. The annual income of the Massachusetts school fund shall, without specific appropriation, be apportioned and distributed for the support of the public schools in the following manner: Every town which complies with all laws relative to the distribution of said income and whose valuation of real and personal property, as shown by the last preceding assessors' valuation thereof, does not exceed \$500,000, shall annually receive \$500; but if its rate of taxation for any year shall be \$18 or more on \$1,000, it shall receive \$75 additional; every such town whose valuation is more than \$500,000 and does not exceed \$1,000,000 shall receive \$300; and every such town whose valuation is more than \$1,000,000 and does not exceed \$2,000,000 shall receive \$150; and every town whose valuation is more than \$2,000,000 and does not exceed \$2,500,000 shall receive \$75. The remainder of said income shall be distributed to towns whose valuation does not exceed \$2,500,000, and whose annual tax for the support of public schools is not less than one-sixth of their whole tax for the year, as follows: Every town whose school tax is not less than one-third of its whole tax shall receive a proportion of said remainder expressed by one-third; every town whose school tax is not less than one-fourth of its whole tax shall receive a proportion expressed by one-fourth; every town whose school tax is not less than one-fifth of its whole tax shall receive a proportion expressed by one-fifth; and every town whose school tax is not less than one-sixth of its whole tax shall receive a proportion expressed by one-sixth. All money appropriated for other educational purposes, unless otherwise provided for, shall be paid from the treasury of the Commonwealth.

The income of said fund which has accrued on the 31st day of December in each year shall be apportioned by the commissioners of the Massachusetts school fund in the manner provided for by section 1 of this act, and shall be paid to the several towns on the 25th day of January thereafter.

The sums received by any town under the provisions of this act shall be held by the town treasurer, and shall be expended only for expenses in maintenance of the public schools authorized by the school committee, in accordance with

existing laws; and it shall be the duty of the treasurer to keep a separate account of all sums so received and expended, and the school committee shall make an annual report to the State board of education, in such form as may be prescribed by said board, of the amount received during each year, the amount expended from such receipts, the purpose for which such expenditures have been made, in detail, and the balance, if any, remaining unexpended. And whenever it appears that, in the opinion of the State board of education, the sums paid to any town have not been used in whole or in part in accordance with the provisions of this section, or that they have not been held and accounted for separately, or that the report thereof herein required has not been made, the commissioners of the school fund are hereby authorized to withhold, as they may deem advisable, the whole or any part of the future allowances otherwise falling to such town under the provisions of this act.

No such apportionment and distribution shall be made to a town which has not maintained a school as required by law; or which, if containing 500 families or householders, has not maintained, for at least thirty-six weeks during the year, exclusive of vacations, a high school such as is mentioned therein; or which has not made the school returns, and complied with the laws relative to truancy; or which has not raised by taxation for the support of public schools which are authorized or required by law, including the wages of teachers, the transportation of school children, fuel, the care of fires, schoolrooms, and school premises, supervision, text-books, and supplies, and school sundries or incidentals during the school year embraced in the last annual returns, an amount not less than \$3 for each person between the ages of 5 and 15 years resident in such town on the 1st day of September of said school year. The income of said fund shall be applied by the school committees of the towns receiving it to the support of the public schools therein; but said committees may apply not more than 25 per cent thereof to the purchase of books of reference, maps, and apparatus for the use of said schools. The income of the Todd fund shall be paid to the board of education, to be applied by said board to specific objects, in connection with the normal schools, not provided for by legislative appropriation.

Moneys received by a county treasurer under the provisions relating to dogs and not paid out for damages, shall in the month of January be paid back to the treasurers of the cities and towns in proportion to the amounts received from such cities and towns; and the moneys so refunded shall be expended for the support of public libraries or schools. In Suffolk County moneys so received by the treasurer of a city or town, and not so paid out, shall be expended by the school committee for the support of public schools.

Taxation.—Towns shall raise by taxation money necessary for the support of public schools. A town which refuses or neglects to raise money for the support of schools as required by law shall forfeit an amount equal to twice the highest sum ever before voted for the support of schools therein. A town which refuses or neglects to choose a school committee shall forfeit not less than \$500 nor more than \$1,000 to the use of the county. Three-fourths of such forfeiture so paid shall be paid by the county treasurer to the school committee, if any; otherwise, to the selectmen of the town from which it has been recovered, who shall appropriate it to the support of the schools of such town as if it had been regularly raised by the town for that purpose.

A town may appropriate money for conveying pupils to and from the public schools, or, if it maintains no high school or public school of corresponding grade but affords high school instruction by sending pupils to other towns, for the necessary transportation expenses of such pupils, the same to be expended by the school committee in its discretion.

MICHIGAN.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—County board of examiners—County commissioner of schools—Township school inspectors—District board of directors—Board of trustees.

State board.—There shall be elected every two years a member of the State board of education, who shall serve for six years. The State superintendent shall be ex officio a member as well as secretary of the board. The board shall

have the general supervision of the State normal schools, and shall grant teachers' certificates to certain persons, as hereinafter set forth.

State superintendent.—At each biennial election there shall be elected a superintendent of public instruction, who shall have his office at the seat of government. A vacancy shall be filled by the governor, by and with the advice of the senate. The State superintendent shall have general supervision of public instruction and of all the State institutions, other than the university, that are essentially educational in their character; and he shall visit the university, the agricultural college, the institutions for the deaf, for the blind, the industrial school for boys and for girls, the school for dependent and neglected children, and meet with the governing boards of each institution at least once in each year. He shall biennially report to the governor the following: The condition of the university and of each of the other State educational institutions, all incorporated institutions of learning, and the primary, graded, and high schools; the estimated cost of the system and amount of expenditures from all educational funds and plans for their better management; plans for the better organization of the educational system; the annual reports and accompanying documents, so far as he shall deem the same of sufficient public interest, of all the State institutions of educational character; abstracts of the annual reports of the school inspectors of the several townships and cities of the State, and all such other matters relating to his office and to the subject of education in general as he may deem expedient to communicate. The State superintendent shall semiannually apportion the primary school interest fund among the several townships and cities of the State in proportion to the number of children in each between the ages of 5 and 20 years, as the same shall be reported to him by the board of school inspectors made to him for the school year closing prior to the May apportionment, drawing on the State treasurer in favor of the treasurer of each county.

County board of examiners.—The board of supervisors of each county shall biennially appoint two persons as school examiners, who, together with the county commissioner shall constitute a board of school examiners who shall examine all persons who offer themselves at two regular public examinations at the county seat; and shall also hold, for the same purpose, not more than two special public examinations as the interests of the schools may demand. The board shall grant certificates to those found qualified. The appointed members shall receive \$4 per diem for each day actually employed in performance of duty.

County commissioner of schools.—There shall be elected every fourth year, beginning April, 1903, a county commissioner of schools, and in case of vacancy the judge of probate, together with the county board, shall appoint some suitable person to the office. The person so elected or appointed shall execute a bond in the sum of \$1,000 for the faithful performance of fiscal duties. No person shall be eligible to the office of county commissioner who shall not be a graduate in the literary department of some reputable college, university, or State normal school, or hold a State teacher's certificate, or hold a first-grade certificate: *Provided*, That in counties having less than 50 schools subject to the supervision of the county commissioner a person holding at the time of election a second-grade certificate shall be eligible. It shall be the duty of the county commissioner to notify the superintendent of public instruction and the chairman of each township board of school inspectors of the county of his election; keep a record of all examinations held by the board of school examiners, and sign all certificates and other papers and reports issued by the board; receive the institute fees provided by law, and pay the same to the county treasurer quarterly; keep a record of all certificates granted, suspended, or revoked by the board or himself, showing to whom issued, with the date, grade, and duration of each certificate, and if suspended or revoked, with the date and reason therefor; furnish to each township clerk a list of persons, with data, legally authorized to teach in the county at large and in the township; to visit each of the schools in the county at least once in each year, and examine carefully the discipline, mode of instruction, progress, and proficiency of the pupils, provided that in counties having 120 or more districts he may appoint such assistants as may be necessary, who shall perform such duties as the commissioner shall direct, but their expenses shall not in any one year exceed \$90; counsel with the teachers and school boards as to the courses of study to be pursued and as to any improvement in the discipline and instruction in the schools; promote the improvement of the schools in the county, and of the teachers and officers, and act as assistant conductor of institutes appointed by the superintendent of public instruction; receive the triplicate

annual reports of the several boards of school inspectors, examine into the correctness of the same, and, when approved, forward one copy of each to the State superintendent and the other to the county clerk; make an annual report to the State superintendent, and obey all instructions from him, and distribute the blanks and communications forwarded by him. His compensation shall be not less than \$500 in a county having 50 schools, not less than \$1,000 where there are 100 schools under such supervision, and not less than \$1,200 where there are 125 schools under supervision, but in no case shall it exceed \$1,500 per annum. The necessary contingent expenses of the commissioner for printing, postage, stationery, record books, and room rent for public examinations shall be allowed by the county supervisors to the sum of \$200. No traveling expenses shall be allowed either to a commissioner or any assistant visitor or school examiner. No commissioner shall receive an order for compensation until he shall have filed with the county clerk, first, a certified statement from the State superintendent that all reports required of him have been properly made and filed; and, second, a detailed statement, made under oath, showing what schools have been visited by him during the preceding quarter and what amount of time was consumed in each school, naming township and school district. No commissioner shall act as agent for the sale of any school furniture, text-books, maps, charts, or other school apparatus, nor be interested financially in any summer, normal, or teachers' training class in the county for which he was elected. In case of vacancy, the office shall be filled by the chairmen of the township boards of school inspectors in joint session.

Township board of school inspectors.—At the annual meeting of each township there shall be elected one school inspector, who shall hold office for two years and be an elector of the district, or a woman 21 years of age who has resided in the State three months and in the township ten days. The school inspectors of each township, together with the township clerk, shall constitute the township board of school inspectors. The township clerk shall be clerk of the board, and the other members shall be elected chairman and treasurer, and shall give bond to double the amount of moneys to come into his hands.

The said board shall annually make in triplicate a report setting forth the whole number of districts in their townships, the amount of money raised and received for township and district libraries, and such other items as are given in the reports of the district school directors for the preceding year or as may be required by the State superintendent. Two copies of the report shall be forwarded to the commissioner and one filed in the office of the township clerk. Before making their annual report, it shall be the duty of the board to examine the list of legally qualified teachers on file in the office of the township clerk, and if the examination shows school has not been taught for the legal period, the board shall certify to the facts in the case in the annual report. It shall be their duty also to render to the township board [not school inspectors] a full account of all moneys received and disbursed by them. The whole number of meetings of the township board of school inspectors at the expense of the township during any one school year shall not exceed eight.

The chairman of the township board of school inspectors shall have general supervisory charge of the schools of his township, subject to such advice and direction as the county commissioner may give, and shall make such reports of his official labors and of the condition of the schools as the State superintendent may direct or the commissioner request.

The board shall divide the township into school districts, which they may from time to time alter and regulate, and the districts shall be as compact as practicable.

District board of directors.—At the first meeting in each school district there shall be elected by ballot a moderator for the term of three years, a director for two years, and a treasurer for one year; and on the expiration of their respective terms and annually thereafter their successors shall be elected in like manner for a term of three years. Removal from the district, neglect to file his acceptance or renew any official bond, or other vacancy, however caused, shall be filled by the board thus created; or, in case of two vacancies, by the district, in special meeting; or in case of the entire board being vacant, or if any vacancy is unfilled for twenty days, then the township board of school inspectors shall appoint a new board or fill the vacancy, as the case may be. Any qualified voter in a school district who has property assessed for school tax shall be eligible to office in such school district, unless an alien. Meetings may be called by one member serving the other with notice twenty-four hours in advance, but a majority shall constitute a quorum.

The board shall purchase the necessary books and stationery for doing and recording the business of the district in an orderly manner; shall have the general care of the schools, make and enforce suitable rules and regulations for their government and management and for the care and preservation of school property which is under their care, if not specially confided to the custody of the director; lease or purchase sites and build or rent schoolhouses; sell sites and other property when directed by the district meeting; estimate the amount to be raised which, in addition to other school funds, is necessary for the entire support of the schools and to meet the deficit of the previous year; report to the township clerk the amount of taxes voted and the character of all taxes which the board is authorized to impose on the taxable property of the district, and present to the district in writing an accurate statement of all moneys of the district received and disbursed by it; contract in writing with duly qualified persons who desire to teach in the public schools, and specify what studies shall be taught in the public schools other than those required by law, and may purchase text-books for impecunious pupils.

The moderator shall preside at all meetings of the district and board, countersign all orders legally drawn by the director, prosecute for the district on the treasurer's bond, and perform such other duties as may be required.

The director shall act as clerk to the district and board meetings, draw and sign warrants upon the township treasurer and the district treasurer, provide the necessary appendages for the schoolhouse and keep the same in repair, present at each annual meeting an estimate of the expenses necessary to be incurred by the director and for the payment of any district officers, preserve and file copies of all reports made to the school inspectors, and safely preserve and keep all books, etc., belonging to his office or to the district when not otherwise provided for; take the census of the district, making a list of the names and ages of all the children from 5 to 20 years of age, verified by oath, but children in almshouses, prisons, or asylums not residents of the district or attending the schools shall be omitted, as also Indian children. He shall report to the board of school inspectors at the close of each school year the whole number of children belonging to the district between the ages of 5 and 20 years, the number attending school during the year under 5 or over 20 years of age, the number of nonresident pupils of the district that have attended school during the year, the whole number that have attended school during the year, the length of time the schools have been taught during the year by qualified teachers, the teachers' names, wages, and duration of service, the average time pupils 5 to 20 years of age have attended school during the year, percentage of attendance, the amount of money received from the township treasurer, the amount raised by the district and the purpose for which intended, the kind of books used, and such other facts as may be required. The director of a fractional district shall make his annual report to the clerk of the township in which the schoolhouse is situated, and also to the clerk of the other township in which the fractional district is situated.

The treasurer of each school district shall give bond in double the amount probably coming into his hands, pay all orders of the director, report to the district board in writing concerning the receipts and expenditures, and shall appear for the district when directed by it, except in cases in which he is interested adversely to the district.

Any school district containing more than 100 children between the ages of 5 and 20 years may, by a two-thirds vote of the qualified electors present at any annual or special meeting, organize as a graded district, and shall elect by ballot from the qualified voters of the district a trustee for one year, two for two years, and two for three years, and annually thereafter their successors for three years, who shall select from among themselves a moderator, director, and treasurer, and for cause shall remove any of them, and shall fill vacancies until the next meeting of the district, and twenty days after the meeting the vacancies left by it unfilled shall be filled by the school inspectors of the township or city. The board of trustees shall classify and grade the pupils attending schools in their district, and shall cause them to be taught in such schools or departments as they may deem expedient (including a high school, if ordered at the annual district meeting to establish a high school). When ordered at annual district meeting, the board shall fix the requisites for admission to and the fees to be paid in such high school, shall audit the accounts of the director, who shall be limited to an expenditure of \$50 annually upon the school property of the district, unless authorized by the board to exceed that amount; shall employ the teachers and other necessary employees and determine the amount of their compensation: *Provided*, That when nonresident pupils, their parents or

guardians, shall pay a school tax in the district, they shall be required to pay only a sum equal to the difference between the amount of the tax and the amount charged for tuition in the high school.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes—Associations.

Appointment, qualifications, and duties.—No contract with any person not holding a legal certificate of qualification shall be made by a district board.

The board of school examiners shall meet at the county seat on the second Thursdays in March and August, and upon not more than two other occasions, for the purpose of examining all persons who may offer themselves as teachers of the public schools. First, second, and third grade certificates shall be granted only at the regular public examinations. The board of school examiners shall meet on the Saturday following each public examination. The board shall grant certificates to persons in such form as the State superintendent shall prescribe, licensing as teachers all persons 18 years of age who have attended the public examinations and who shall be found qualified in respect to good moral character, learning, and ability to instruct and govern a school; but no certificate shall be granted to any person who shall not have passed a satisfactory examination in orthography, reading, writing, grammar, geography, arithmetic, theory and art of teaching, United States history, civil government, and physiology and hygiene, with reference to the effects of alcoholic drinks, stimulants, and narcotics. The board of examiners shall have the right, however, to renew without examination the certificates of persons who shall have previously obtained an average standing of at least 85 per cent in all studies covered in two or more previous examinations and who shall have been since the examination continuously and successfully teaching in the same county. All certificates shall be signed by the county commissioner and at least one other member of the board of examiners. All examination papers shall be prepared by the State superintendent and be furnished by him to the county commissioner under seal, only to be broken in the presence of the persons to be examined and on the day of examination.

There shall be three grades of certificates granted. The certificate of the first grade shall be issued only to those who have taught at least one year with ability and success, and shall be valid for four years. When granted, however, the examination papers and certificate shall be, within ten days, forwarded to the State superintendent for inspection, and if countersigned by him shall be good in any county in the State. A certificate of the second grade shall be granted only to those who shall have taught at least seven months with ability and success, and it shall be valid throughout the county in which issued. A certificate of the third grade shall be either of two classes, to wit: Third-grade certificates of class A shall be granted only to persons who have taught successfully and continuously in primary departments of graded schools for at least three years next preceding the examination, and such certificate shall entitle the holder to teach in primary departments of graded schools only. Third-grade certificates of class B shall license the holder to teach in any school of the county in which it shall be granted for one year, but no more than three certificates of this class shall be granted to the same person. The county commissioner, however, shall have power, upon the results of an examination satisfactory to himself, to grant certificates licensing the holder thereof to teach in a specified district, but a second special certificate shall not be granted the same person, nor shall it continue in force longer than the next public examination. Any certificate may be revoked for cause. [The force of normal-school certificates is given below.]

The teacher shall keep a correct list of the pupils and their age, number of days each pupil attends, average attendance, and percentage of attendance, and shall furnish the director a correct copy of the same at the close of school.

Preliminary training.—The purpose of the State normal schools shall be the instruction of persons in the art of teaching and in all the various branches pertaining to the public schools of Michigan, and the schools shall have a course of study intended specially to prepare students for the rural and the elementary graded schools, giving not less than twenty weeks of professional instruction. The State board of education shall provide the necessary rules for the government of the schools, the courses of study, a fully equipped training school as a school of observation and practice, grant diplomas, and upon the completion of the course specially prescribed for rural and elementary graded schools shall

grant, upon the recommendation of the principal and a majority of the heads of departments of the school, a certificate, which shall be signed by the board and the principal of the normal school, and shall contain a list of the studies included in the course. This certificate shall entitle the holder to teach in any of the appropriate schools of the State for five years. Upon the completion of either of the four years' advanced courses of study prescribed by the board it may grant, upon recommendation of the principal and a majority of the heads of the departments, a certificate, which shall set forth the studies completed, and shall be a life certificate. Training classes for teachers in rural schools may be established in connection with some high school in any county upon application by the board of supervisors of the county and the voters of the district in which the high school is situated to the State superintendent. The State superintendent, the county commissioners, and the superintendent of the high school constitute the county normal board, and may fix courses of study and grant certificates for five years upon completion of a two years' course of study. One-half the expense of these classes is borne by the State; whole expense not to exceed \$2,000 in any year.

Institutes.—The State superintendent is authorized to hold annually an institute for the State at large, the cost of which shall not exceed \$400, to be paid out of the general fund.

The superintendent shall annually appoint a time and place in each county for holding a teachers' institute unless there are less than 1,000 children between the ages of 5 and 20 years, when it may be held at the option of the State superintendent, and if 15 teachers interested do not request that an institute be held the superintendent may hold a joint county institute for several counties, drawing from the institute fund the amount to the credit of each county. Inability of the State superintendent to conduct an institute warrants him in appointing a conductor to act under his supervision. Every teacher attending an institute thus provided for shall be given a certificate setting forth the fact, and no teacher shall be deprived of pay for the time lost in attending.

Associations.—Any 15 or more teachers or other persons residing in the State who shall associate for the purpose of promoting education and science and improvements in the theory and practice of teaching may form themselves into a corporation under such name as they may choose, providing they shall have published in some newspaper published at Lansing, or in the county in which the association is to be located, for at least one month previous to its organization, and shall file in the office of the secretary of state, a copy of the constitution and by-laws of said association. The association may hold and possess real and personal property to the amount of \$5,000, but the funds or property thereof shall not be used for any other purpose than for the legitimate business of the association in securing the objects of its incorporation. It shall have all the powers and duties of a corporation.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—All persons resident in any school district and 5 years of age shall have an equal right to attend any school therein, and no separate school or department shall be kept for any persons on account of race or color, but this shall not prevent the grading of the schools according to the intellectual progress of the pupil, said schools of different grades to be taught in separate places if deemed expedient. The district meeting shall determine the length of time school shall be taught, which shall not be less than nine months in districts having 800 children 5 to 20 years of age nor less than five months in all other districts on pain of forfeiture of their share of the primary-school interest fund.

Every parent, guardian, or other person having control of any child between the ages of 8 and 15 years shall be required to send such child to a public school for a period of at least four months in each school year, at least six weeks of which shall be consecutive, unless such child be excused from such attendance by the board of the school district in which such parents or guardians reside, upon its being shown to the board's satisfaction that the child's bodily or mental condition has been such as to prevent its attendance at school or application to study for the period, or that such child is taught in a private school or at home in such branches as are usually taught in primary schools or has already acquired the ordinary branches of learning taught in public

schools: *Provided*, In case a public school shall not be taught for four months during the year within 2 miles by the nearest traveled road of the residence of any child within the school district, such child if under 9 years of age shall not be liable to the provisions of this act.

No child under 10 years shall be employed in any factory, warehouse, or workshop. No child under 14 years of age shall be employed by any person, company, or corporation to labor in any business, unless such child shall have attended some public or private day school where instruction was given by a teacher qualified to instruct in such branches as are usually taught in primary schools for at least four months of the twelve next preceding the month in which such child shall be so employed.

Every parent, guardian, or other person having charge of any child from 8 to 14 years of age who has been temporarily discharged from any business or employment shall send such child to some public or private day school for a period for which such child shall have been discharged, unless such child shall have been excused from such attendance by the board of the school district for reasons stated above.

Failure to comply with the above provisions is a misdemeanor, subjecting the guilty person to a fine of not less than \$5 nor more than \$10 for the first and not less than \$10 for each subsequent offense; and it shall be the duty of the officers detailed or appointed under the provisions of this act to assist in the enforcement thereof and to institute proceedings.

In all cities, villages, and townships in this State maintaining and supporting a graded school the board of education or other authority may establish one or more ungraded schools for the instruction of certain children, and may require such children to attend the school through the city police or village marshal. The following classes of persons, 8 to 16 years, shall be subject to this compulsion: Habitual truants from any school, the incorrigibly turbulent or disobedient, the vicious or immoral, and loiterers on the streets. If parent or guardian shall, after warning, fail to comply with the law, he or she shall be proceeded against before a justice of the peace and subjected to a fine of not less than \$10 nor more than \$25, or may be required to give bond for \$100 that he will comply with the law. But if the offending party plead his inability to cause the child to attend school, then the child shall be sent to one of the State industrial schools, according to its sex.

(For transportation of pupils, see Finances—Taxation.)

Character of instruction.—The district board shall specify the studies to be pursued in the schools of the district in addition to the branches in which instruction is now required to be given in the public schools. (See Teachers—Appointment and qualifications.) Any school district containing more than 100 children between the ages of 5 and 20 years may, by a two-thirds vote of the qualified electors present at any meeting, organize as a graded school district and shall immediately elect a board of trustees, who shall classify and grade the pupils of the district and cause them to be taught in such schools or departments as they may deem expedient, including a high school if that grade of instruction be ordered by the district meeting and may charge fees for any branch of such secondary instruction.

Text-books.—The district board may purchase at the expense of the district such text-books as may be necessary for the use of children when parents are not able to furnish the same, and they shall include the amount of such purchase in the report to the township clerk to be levied in like manner as other district taxes. Each school board of the State shall, when authorized by the district, purchase the text-books used by the pupils of the schools in the district in each of the following subjects: Orthography, spelling, writing, reading, geography, arithmetic, grammar (including language lessons), national and State history, civil government, and physiology and hygiene, and all text-books used in any district shall be uniform in any one subject. Text-books so adopted shall not be changed within five years. The text-books to be used for instruction in physiology and hygiene, with special reference to the nature of alcohol and narcotics and their effects upon the human system, shall give at least one-fourth of their space to the consideration of the nature and effects of alcoholic drinks and narcotics, and the books used in the highest grade of graded schools shall contain at least twenty pages of matter relating to this subject, and all text-books used in giving the foregoing instruction shall first be approved by the State board. When the district has authorized the district board to raise by tax a sufficient sum to comply with the foregoing provisions,

it shall contract, at a price not greater than the net wholesale price, or through advertisement, for the books selected, to be loaned to the pupils. Any district may take further action at a subsequent annual meeting after it has either adopted or rejected free text-books. Any officer refusing or neglecting to purchase or to provide the money for purchasing the text-books voted shall be deemed guilty of a misdemeanor, and upon conviction shall be liable to a fine of \$50 or imprisonment in the county jail for thirty days, or both. But any board may buy its books of local dealers if sold as cheaply as offered in the lowest bid.

Buildings.—The district board shall have the care and custody of the schoolhouse and other property of the district, except so far as the district shall not have confided the care and custody thereof to the director. It may be opened for public meetings unless determined otherwise. The director shall provide the necessary appendages and keep them in good condition and repair during the time school shall be taught, but he shall not purchase charts or any apparatus to be used in the schoolroom without a vote of the district authorizing him to do so. The district board shall purchase or lease in the corporate name of the district such sites for schoolhouses as shall have been lawfully designated, and shall build, hire, or purchase such schoolhouses as may be necessary out of the fund provided for that purpose and make sale of any site or other property of the district when lawfully directed by the qualified voters; but no district in any case shall build a stone or brick schoolhouse upon any site without having first obtained a title in fee to the same or a lease for ninety-nine years, nor shall any district build a frame schoolhouse on any site for which they have not a title in fee or a lease for fifty years without securing the privilege of removing the said schoolhouse. After schools have been maintained at least eight months in the year, any surplus money arising from the 1-mill tax may be used in purchasing sites, buildings, or furniture, if so ordered by district meeting.

4. FINANCE.

Funds (permanent and special).—Taxation.

Funds (permanent and special).—The proceeds from the sale of all lands that have been or hereafter may be granted by the United States for educational purposes, and the proceeds of all lands or other property given by individuals or appropriated by the State for like purposes, shall be a perpetual fund, the income of which shall be inviolably appropriated annually to the specific objects of the original gift, grant, or appropriation. All escheated lands shall become a part of the school fund. The State superintendent shall semiannually, in May and November, apportion interest of the primary school fund among the several townships and cities of the State in proportion to the number of children in each between the ages of 5 and 20 years, as shall appear from the reports of the boards of school inspectors made prior to the May apportionment or from the best sources of information at his command, and shall prepare a statement of the amount in the aggregate payable to each county; and on receipt of such statement the auditor-general shall draw his warrant upon the State treasurer in favor of the treasurer of each county to the amount due. The superintendents shall also send written notices to the clerks of the several counties of the aggregate amount to be disbursed in their respective counties and the amount payable to the townships and cities therein, respectively. In case any county, township, city, or district shall fail to receive its share of the interest of the school fund, such deficiency shall be made up in the next apportionment; and whenever any district has had three months' school, but has failed to have the full time of school required by law through no fault of the district or its officers, he may include such district in his apportionment.

All money derived from the dog tax remaining after the satisfaction of the claims of sheep owners shall be apportioned among the several school districts, if over \$100, in proportion to the number of children of school age.

Taxation.—It shall be the duty of the supervisor of the township to assess the taxes voted by every school district in his township, and also of all other taxes provided for by the school law chargeable against such district or township, upon the taxable property of the district or township respectively, and to place the same on the township assessment roll in the column for school taxes, and the same shall be collected and returned by the township treasurer in the same manner and for the same compensation as township taxes. He shall also assess 1 mill upon each dollar of taxable property, and all money so raised shall be

apportioned by the township clerk to the district in which it was raised. The supervisor on delivery of the warrant for the collection of taxes to the township treasurer, shall also deliver to him a written statement of the amount of school and library taxes, the amount raised for district purposes on the taxable property of each district in the township, the amount belonging to any new district on the division of the former district, the names of all persons having judgments assessed upon the taxable property of any district, with the amount payable, and the amount of the 1-mill tax levied within the bounds of a fractional school district a part of which is situate within his township, but the returns of which are made to the clerk of another township, and the treasurer shall pay to the township treasurer of such other township the amount of the taxes so levied and certified to him for the use of such fractional school district. The township treasurer shall retain in his hands, out of the moneys collected by him, after deducting the amount of tax for township expenses, the full amount of the school taxes on the assessment roll, and hold the same subject to the warrant of the proper district officers, to the order of the school inspectors or other persons authorized to draw thereon, and give written notice to the township clerk of the amount.

Any school district may by a two-thirds vote of its qualified electors present at an annual or called meeting issue bonds to pay for a schoolhouse site and to erect or furnish school buildings as follows:

Districts—	Indebtedness.
Of less than 30 persons 5 to 20 years may incur not more than-----	\$300
Of 30 persons 5 to 20 years may incur not more than-----	500
Of 40 persons 5 to 20 years may incur not more than-----	700
Of 50 persons 5 to 20 years may incur not more than-----	1, 000
Of 75 persons 5 to 20 years may incur not more than-----	2, 000
Of 100 persons 5 to 20 years may incur not more than-----	3, 000
Of 125 persons 5 to 20 years and an assessed valuation of property of \$150,000 or more may incur not more than-----	5, 000
Of 200 persons 5 to 20 years may incur not more than-----	8, 000
Of 300 persons 5 to 20 years may incur not more than-----	15, 000
Of 400 persons 5 to 20 years may incur not more than-----	20, 000
Of 500 persons 5 to 20 years may incur not more than-----	25, 000
Of 800 persons 5 to 20 years may incur not more than-----	30, 000

But in no case shall the indebtedness of a district extend beyond ten years for money borrowed. And in all proceedings under these provisions the director, treasurer, and one person appointed by the district board shall constitute a board of inspection, who shall cause a poll list to be kept and a suitable ballot box to be used, which shall be kept open for two hours. When the school district shall have voted to borrow any sum of money, the district board shall issue the bonds thereof in sums of not less than \$50 and at a rate of interest not greater than 8 per cent, and the district is authorized to provide for the payment of principal and interest by taxation. (See also Schools—Attendance.)

Any district may vote a tax for the transportation of pupils to and from school within the district and may use the 1-mill tax for the same purpose. Any rural school district maintaining school for five months may vote a tax to pay the transportation to and tuition in any high school designated by the district board. Any school district may by a two-thirds vote establish a library and vote a tax to sustain the same. When so established, the district is entitled to its share of all library funds apportioned to the township.

MINNESOTA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State high school board—County superintendent—District trustees—City, town, and village boards of education.

State superintendent.—A superintendent of public instruction shall be appointed by the governor, by and with the consent of the senate, and shall hold his office for two years. An office shall be provided for him at the seat of government,

in which he shall file all papers, reports, and public documents transmitted to him by county superintendents, county auditors, and from other sources; and he shall keep a fair record of all matters pertaining to his office. He is required to appoint an assistant superintendent, to perform such service in the department as may be assigned to him. He shall meet the county superintendents of each judicial district, or two or more districts combined, if he shall deem it more conducive to the interests of education, at such time and place as he shall appoint, with the object of accumulating valuable facts relative to schools, and in general to listen to all communications and suggestions and enter into all discussions relative to the work of the schools. He shall annually hold in the sparsely settled counties as many State institutes as may be practicable. He shall report to the legislature through the governor biennially, which report shall contain (1) an abstract of the common school reports received by him from the several county superintendents, showing the number of organized school districts in the State, the number of schools taught, and the enrollment and average attendance in the same; (2) a statement of the condition of public schools and of all other institutions of learning in the State that may report to him; (3) the amount of school moneys collected and expended each year from all sources, specifying the amounts from each source, respectively, and (4) all matters relating to his office, the public schools of the State, and the school fund, the number and character of teachers, and whatsoever else he may deem expedient to communicate. He shall prepare and distribute, through the county superintendents of schools, suitable school registers and blanks for teachers' and clerks' reports to county superintendents.

State high school board.—The State superintendent and the president of the University of Minnesota ex officio, and a superintendent or principal of any high school in the State of Minnesota, to be appointed by the governor, subject to confirmation by the senate, constitute a board of commissioners on graded and preparatory schools for the encouragement of higher education in this State, called the "State high school board." The members of said board shall serve without compensation, but shall be entitled to their actual and necessary expenses.

The State high school board is authorized to appoint a suitable person to inspect high schools, who shall be called the "high school inspector;" to visit each high school in the State and make a report thereon, and perform such other duties as may be required by the board. The salary of the high school inspector shall be fixed by the high school board, and he shall also receive necessary traveling expenses. The high school board shall also appoint a suitable person to inspect State graded schools, whose duties shall be similar to those of the high school inspector. The salary of the graded school inspector shall be fixed by the high school board, and he shall also receive necessary traveling expenses.

Said board may employ such assistant examiners as shall be found necessary, to be paid not to exceed \$3 per day, or 50 cents per hour for services actually performed, and no compensation shall be paid to any person receiving a salary from any State institution.

The high school board shall have power to establish any necessary and suitable rules and regulations relating to examinations, reports, acceptances of schools, courses of study, and other proceedings in connection with high and graded schools claiming State aid: *Provided*, That in all graded and State high schools an optional English or business course of study shall be offered and maintained in addition to the courses of study required to be taken for admission to the State University; the board of education of any graded or State high school may add to or cut out any study or studies in the English or business course as established by said State board. The said board shall keep a careful record of all its proceedings, and shall on or before the 1st day of September in each year make a report to the State superintendent, showing in detail all receipts and disbursements, the names and number of high and graded schools receiving aid, and the number of pupils attending the classes in each, to which report it may add such recommendations as are deemed useful and proper.

County superintendent.—In each county of this State there shall be elected biennially a county superintendent of schools, vacancies to be filled by county commissioners. County superintendents may examine and license teachers and annul certificates for causes shown; shall visit and instruct the schools of their counties at least once in each term and give such advice to the teachers as may be requisite and necessary; organize and conduct at least one institute each year

for the instruction of teachers, if they deem the same expedient; encourage teachers' associations, introduce to the notice of teachers and the people the best modes of instruction, the most approved plans of building and ventilating schoolhouses, of ornamenting and adapting school grounds to the convenience and healthful exercise of children; stimulate school officers to the proper discharge of their duties; receive the reports of school district clerks and teachers and transmit an abstract of the same to the State superintendent, adding thereto a written statement on the condition and prospects of the schools under their charge, together with such other information and suggestions as they think proper to communicate. To secure uniformity and accuracy in such reports county superintendents may call meetings of district clerks annually.

The salary of the county superintendent shall be fixed by the county board of commissioners, but shall not be less than \$10 for each organized district in the county. In case of physical inability to visit schools or examine teachers the county superintendent may appoint a deputy for not more than sixty days in any one year. He may also, in counties having 100 or more school districts, appoint, with the consent of the county board of commissioners, an assistant for twenty days of work in visiting schools in the first part of each term, winter and summer, who shall be paid a per diem of \$3 and necessary traveling expenses. In counties having 175 or more organized districts a permanent assistant may be appointed at a salary of not more than \$1,500 per annum. Every failure of the county superintendent to make the reports required by law causes him to forfeit \$50 of his salary.

District board of trustees.—School districts shall be classified as common school districts, independent school districts, and special school districts. Districts are made or changed by the county commissioners after hearing of the localities concerned, but any district may contain the entire township in which it is situated, or a tract 6 miles square in different townships. The legal voters of school districts when lawfully assembled, not less than five being present, shall have power, by a majority vote of those present, to elect a director, clerk, and treasurer, which election shall be by ballot; to designate a site for a schoolhouse, which shall not be changed after having been designated unless at least a majority of the legal voters in the district who have resided therein for a period of at least six months prior to such vote, and two-thirds of the voters so qualified who are present and voting, vote in favor of such change (except that whenever a majority of the legal voters of any school district voting thereon shall determine to build a new schoolhouse, or to remove a schoolhouse already built, in such district, and the schoolhouse site therein shall be more than one-quarter of a mile from the center of the district, then a majority of the legal voters of such district voting thereon may change the site to a more central location); to vote an amount of money, to be raised by a tax on the taxable property of the district, sufficient to meet the conditions on which apportionments from State school funds are made to districts, and to raise such additional amounts as the district may determine to purchase or lease a site for a schoolhouse, and to build, hire, or purchase such schoolhouse when the same is necessary; to keep in repair and provide the same with the necessary furniture and appendages; to procure fuel; to purchase or increase the library and school apparatus; to appoint a librarian, and to make all rules necessary for the usefulness, preservation, and increase of the library.

The director, treasurer, and clerk shall form the board of trustees. They shall serve three years, one retiring each year, any vacancies to be filled by the remaining members.

The board of trustees shall have the general charge of the interests of schools and schoolhouses in their district; lease or purchase in the corporate name of the district a site for a schoolhouse designated by the legal voters of the district; build, hire, or purchase a suitable schoolhouse with the funds provided for that purpose, and when directed by the legal voters of the district may sell or exchange any such site or schoolhouse; submit an estimate of the expenses of the district for the coming year; levy a tax if the district neglects to vote it, and contract with and hire teachers.

City, town, and village boards of education.—Any city, town, village, township, or school district may be organized into an independent school district in the manner and with the powers hereinafter specified, but this shall not apply to any township or school district containing less than 500 inhabitants unless said school district consists in whole or in part of an incorporated city, town, or village, nor to any city, town, or village, or any part thereof, which now has any

special law regulating its schools; and the territorial limits of no independent district hereafter organized shall exceed 6 miles square.

In case a majority of the voters are in favor of creating an independent district, the district shall elect six directors, two to retire each year, who shall collectively be styled the board of education (of the city, town, village, or township), who shall elect a president, clerk, and treasurer, and may also elect a superintendent at such salary as they may fix. The superintendent shall visit the schools of the district, superintend the grading of them and the examinations for promotion, perform such other duties as the board may prescribe, and shall report to the State superintendent through the county superintendent or directly.

The board shall establish such grades of schools, alter, and discontinue the same; provide necessary rooms or buildings for schoolhouses, and grounds about the same; shall, when authorized by the district, purchase or erect one or more schoolhouses, and purchase sites; purchase, sell, and exchange school apparatus, furniture, stoves, and other appendages for schoolhouses, and furnish fuel for the same; take care of the property of the district, and procure insurance, and make ordinary repairs upon the same, or any part thereof, when deemed expedient; contract with, employ, and pay teachers who have received certificates, and discharge the same; shall defray the necessary expenses of the board, pay the compensation of the clerk, treasurer, and superintendent, and for such printing, record books, stationery, and other incidental matters as may be deemed proper; superintend and manage in all respects the schools of said district, and from time to time adopt, alter, modify, and repeal rules for their organization, government, and instruction, for the keeping of registers, for the reception of pupils resident and nonresident within the district, their suspension, expulsion, and transfer from one school to another; prescribe text-books and a course of study for the schools, and visit each school in the district not less than once in three months; provide for the prompt payment at maturity of the principal and interest of any indebtedness of the district by voting from time to time taxes upon the taxable property of said district sufficient to meet the same, making allowances for delinquency in paying any part of such taxes; and shall, when authorized by a vote of the district, make, execute, and deliver, for and in behalf of said district, deeds, mortgages, releases, and all other instruments relating to the real property thereof.

2. TEACHERS.

Appointment and duties—Certificates—Preliminary training—Institutes.

Appointment and duties.—The board of trustees, at a meeting called for that purpose, shall hire such teachers only as have certificates of qualification, on written contracts, specifying the wages per month and time employed as agreed upon by the parties; but no contract shall be made with any teacher who is related by blood or marriage to any member of the school board, without the concurrence of all the members of the board of trustees by vote duly entered on the clerk's record of proceedings.

The teacher shall keep a register, and shall report to the county superintendent under penalty of having pay withheld.

Certificates.—The State superintendent is authorized to issue State certificates of the following grades: A first-grade certificate, valid for five years, and a second-grade certificate, valid for two years. The requirements for first and second grade certificates shall include both scholastic and professional ability, and the regulations governing the examination for such certificates shall be prescribed by the State superintendent. A complete certificate shall certify the scholastic and professional requirements, skill in teaching, and moral character. The written answers for the scholastic examination hereinafter provided for shall be read and marked under the direction of the State superintendent, and the markings for the professional requirements shall be given by the county superintendent, who shall also be the judge of skill in teaching and moral character of the applicant.

A complete first-grade certificate, certifying to scholastic requirements by the State superintendent and to professional requirements, skill in teaching, and moral character by the county superintendent in whose county the examination is held, shall be valid in any county of the State. A complete second-grade certificate for both scholastic and professional requirements, signed by the State superintendent and the county superintendent, shall be valid in the county in

which the examination is held, and may be made valid in any county by the indorsement of the county superintendent of said county. No teacher shall be entitled to receive a certificate of any grade herein provided for who fails to give proper evidence of possessing a good moral character, and no teacher shall receive a complete first-grade or second-grade certificate who has not had successful experience in teaching for at least eight months for a first-grade and five months for a second-grade, and who shall not be at least 18 years of age; provided, that the county superintendent may issue a limited second-grade certificate, good for one year, to applicants without experience not under 17 years of age who have passed the scholastic examination given by the State department of public instruction. It is further provided that the county superintendent may issue a third-grade certificate upon his own examination for a term of one year, such certificate to designate the district in which it shall be valid, not to be renewable without examination. No teacher shall be entitled to receive a third-grade certificate more than twice in the same county.

The certificate of a State normal school in Minnesota that the holder has completed the three years' certificate course in that school shall, when approved by the State superintendent, entitle the holder to a certificate of the first grade.

The State superintendent shall prescribe regulations for renewing first and second grade certificates and for providing a fair review in the case of an appeal from the decision of a county superintendent.

The State superintendent shall cause to be held at least two examinations each year in every county of the State, at such convenient places as may be designated by the county superintendent. The time for such examination shall be uniform throughout the State, and the examination shall be conducted by the county superintendent of the county in which the examination is held, or by persons appointed by him, strictly according to regulations prescribed by the department of public instruction designed to secure uniformity and fairness. An affidavit may be required of such examiner, certifying that the regulations regarding said examination have been fully observed. The examinations shall be public and the teachers desiring to take the same may dismiss their schools for that purpose for a period not exceeding two days in each year without loss of pay. Any county superintendent may, on his own examination, issue a certificate of any grade to applicants who present satisfactory proof that they were unable to be present at the public examination; such certificates to be valid only in a district specified on their face and until the time of the next public examination.

Examinations for all certificates provided for shall be given in spelling, reading, penmanship, arithmetic, grammar, composition, geography, history of the United States, physiology, and the practical facts of hygiene. In addition to the above branches, all applicants for first-grade certificates shall be examined in elementary algebra, plane geometry, physical geography, natural philosophy, and civil government. The State superintendent may, however, designate equivalent subjects that may be taken in lieu of physical geography, natural philosophy, and plane geometry, at the option of the applicant. All subjects in which the applicant passes an examination shall be designated in the certificate. Questions shall be submitted in music and drawing to such applicants as desire to receive a standing in these subjects. The State superintendent may accept State high-school certificates and certificates from the State normal schools in all such subjects in lieu of an examination, under such conditions as he may prescribe, providing that no standing of less than 75 per cent in such high-school certificate shall be received.

Any applicant failing to pass the scholastic examination may, upon appeal to the State superintendent, have his papers reviewed by the instructors in the corresponding branches at the State university.

Complete first and second grade certificates under this law shall be valid in all grades below the high school in any special or independent districts, unless boards of education of such districts shall decide otherwise.

The State superintendent may issue certificates of qualification without examinations to persons who have taught in public schools of this State for five or more years upon their written application approved by the board of education or school trustees, together with the city superintendent or county superintendent under which said applicant shall have taught the greater part of five years next preceding the date of application.

Permanent teachers of high character and broad scholarship who have a successful experience may, upon examination by the State superintendent or by a committee of 3 competent teachers appointed by him, receive a professional

State certificate, which shall authorize the holder to teach in any public school in the State without further examination; but no life certificate shall be in force after its holder shall permit a space of three years to lapse without following some educational pursuit, unless said certificate be indorsed by the State superintendent. Graduates of colleges and universities of good standing who have received a certificate of the first grade in this State and who shall have taught in any public school in the State with ability and success for at least one year shall be entitled to a professional certificate from the State superintendent without further examination. The branches required for a professional State certificate shall be the following: Written arithmetic, United States history, reading and elocution, English grammar, common and physical geography with map drawings, mathematical geography and projection, school economy, physiology, algebra, natural philosophy, chemistry, composition and rhetoric, bookkeeping, plane and solid geometry, plane trigonometry, geology, zoology, botany, English literature, general history, political economy, intellectual philosophy, moral philosophy, logic, astronomy, civil government and school laws, history of education, and the theory and art of teaching. There shall be two grades of professional State certificates. All of the subjects above mentioned shall be required for first grade, and 21 of the subjects enumerated shall be required for second grade, the optional subjects to be arranged by the State superintendent or the examining board. But the State superintendent shall be authorized to issue yearly permits to deserving teachers of successful experience, who lack not more than three subjects, and by the employment of such teachers State aid shall not be withheld.

The teachers' university certificate issued by the University of Minnesota to graduates of the department of pedagogy shall be valid as a certificate of the first grade to teach in the public schools of the State for a period of two years. At the expiration of two years of actual teaching the certificate of such graduate may be indorsed by the president of the university and the State superintendent upon satisfactory evidence that such service has been successful, and such indorsement shall make said certificate a permanent certificate of qualification.

The diploma from either the elementary or advanced course of study of the State Normal School shall be valid as a certificate of qualification of the first grade to teach in the public schools of the State for a period covering the time of the student's pledge of service, namely, two years from date of graduation. At the expiration of two years of actual teaching service the diploma of such graduate may be indorsed by the president of the normal school from which it was issued, and by the State superintendent, upon satisfactory evidence that such service has been successful and satisfactory to the supervising school authorities under whom it was rendered. Such indorsement shall make the diploma of the elementary course a valid certificate for five years from its date, and the diploma of the advanced course a permanent certificate of qualification.

A county or city superintendent may suspend any certificate for good cause shown, subject to appeal to the State superintendent.

Preliminary training.—The governor shall nominate, and with the consent of the Senate appoint 8 normal school directors, not more than one residing in the same county, who, together with the State superintendent, shall constitute the State normal school board. The board shall have the general supervision, management, and control of the State normal schools, appoint all professors and teachers, and fix their salaries, but in no case shall the salary of any principal exceed \$3,000 per annum.

The State normal school board shall prescribe the courses of study in the normal schools, the conditions of admission, and prepare and confer suitable diplomas upon persons completing the full course of study in the normal department. Such board shall adopt any rules and regulations deemed necessary to the highest efficiency of the schools. It shall be the duty of the board, as a whole or through a committee of their own number, to visit and thoroughly inspect the grounds, buildings, modes of instruction, and the discipline and management of each school at least once during each term. They shall report to the governor, on or before the 1st day of December in each year, through their president, the condition of each school, its receipts and disbursements, its wants and prospects, together with such recommendations for its improvement as they may deem proper and necessary.

The president of each normal school shall annually make a written report to the State superintendent. Such report shall set forth the general statistics of the school, and also a statement of the total number of graduates of such school

who are then engaged in teaching, so far as may be known, with their names, and the name of the district and county in which they are teaching.

The State normal school board shall have power to organize, in connection with each normal school, such model schools as they may deem expedient for the illustration of the best methods of teaching and government: *Provided*, That no more than one teacher shall be employed in either of the model schools, except at the school at Winona, where, so long as provision is made in the normal school for the education of soldiers' orphans, the board may employ one additional teacher.

There shall be no charge for tuition or for incidental expenses to the students of any normal school who shall have filed with the principal thereof a declaration of intention to engage in the work of teaching in the public schools of this State for not less than two years after his or her connection with said school shall cease. The board may fix such rates of tuition for pupils in the model schools and for students not intending to teach as in their judgment may be equitable and just.

The board shall appoint one teacher for each normal school especially qualified to give instruction in teachers' institutes.

Institutes.—The State superintendent shall annually hold in the sparsely settled counties as many State teachers' institutes as he shall find practicable, each to continue in session one week at least. He shall give due notice thereof to all teachers and persons proposing to become such, and invite their attendance. He shall attend and have charge of each institute; invite the aid and cooperation of the superintendent of schools for the county; employ suitable instructors and lecturers to give instruction and addresses to aid the teachers in qualifying themselves for a more successful discharge of their duties. The average expense of such institutes shall not exceed \$100 a week.

He shall annually, in so many and thickly settled localities as he may deem advisable, organize and, with the aid of others selected by himself, conduct normal-training schools for the benefit of teachers who desire such training but are unable to attend a full course at the State normal schools. Such schools shall be without charge for attendance and entirely practical, their object being to impart normal methods of teaching and conducting schools, particularly common schools. They shall continue at least four and not more than six weeks at each place, and the average cost shall not exceed \$100 for each week of the session of a school of 60 persons.

During the time of holding a teachers' institute in any county of this State, it is hereby made the duty of all teachers and persons desiring a teacher's certificate to attend such institute, or present to the county superintendent satisfactory reasons for not so attending, before receiving such certificate, and any school that may be in session in such county shall be closed for one week upon the requirement of the county superintendent, and the teacher shall be allowed to make up the time lost.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—All schools supported wholly or in part by State school funds shall be styled "The Public Schools," and admission to them shall be free to all persons between the ages of 5 and 21 years residing in the district. In independent districts schools shall be kept open from twenty to forty-four weeks. No district can receive aid from the State which does not keep school open for five months.

Boards of trustees and boards of education may suspend or expel pupils for insubordination, immorality, or being infectiously diseased.

The board of trustees of any common school district, or the board of education of any independent or special district, may, by a vote of a majority of all the members of said board, at any regular meeting, exclude from the public school in the district all children under 6 years of age; and when such action has been once taken, it shall not be changed before the beginning of the next school year.

Every parent, guardian, or other person in the State having control of any child between the ages of 8 and 16 years shall be required to send such child to a public school, or private school taught by a competent instructor, for a period of at least twelve weeks in each year, at least six weeks of which time shall be consecutive, unless such child is excused from such attendance by the board of the school district or the board of education of the city or independent school

district in which such parent, guardian, or person having control resides, upon its being shown to their satisfaction that such parent or guardian was not able, by reason of poverty, to clothe such child properly, or that such child's bodily or mental condition has been such as to prevent his attendance at school or application to study for the period required, or that such child is taught at home in such branches of study as are usually taught in the public schools and subject to the same examination as other pupils of the district or city in which the child resides, or that he has already acquired the ordinary branches required by law, or that there is no school taught within 2 miles by the nearest traveled road.

Any parent, guardian, or other person failing to comply with the provisions of this act shall, upon conviction, be deemed guilty of a misdemeanor and fined not less than \$10 nor more than \$25 for the first offense, nor less than \$25 nor more than \$50 for the second and every subsequent offense.

It shall be the duty of any school director or president of the board of education to inquire into all cases of neglect of this duty, and ascertain from the persons neglecting the reasons, if any, therefor, and forthwith to proceed to secure the prosecution of any offense occurring under this act; and any director or president neglecting to secure such prosecution for such offense within ten days after a written notice has been served on him by any taxpayer in said district or city, unless the person so complained of shall be excused by the district or city board or board of education, for reasons hereinbefore stated, shall be deemed guilty of a misdemeanor, and liable to a fine of not less than \$20 nor more than \$50. If upon the trial of any offense as charged herein, it shall be determined that such prosecution was malicious, then the cost in such case shall be adjudged against the complainant and collected as fines in other cases.

Character of instruction.—(For subjects upon which teachers are examined, see Teachers—Certificate.) All instruction given and books used shall be in the English language, but teachers that are able to speak a language that is the vernacular of a pupil may use that language to aid in the teaching of English words, and may also give instruction in that language for one hour or less a day, provided the trustees have unanimously agreed to these innovations. In independent districts the board of education prescribes the course of study and grades the schools.

All school officers may introduce as part of daily exercises of each school in their jurisdiction instruction in the elements of social and moral science, including industry, order, economy, patience, cleanliness, honesty, self-reflection, etc.

Text-books.—The board of trustees or board of education of each school district is empowered to adopt and contract for text-books for the schools under their charge; they may purchase and loan same free to pupils or sell same at cost. No adoption or contract shall be for a period less than three nor more than five years, during which time the text-books so adopted or contracted for shall not be changed. At an annual meeting after due notice, or whenever 5 or more legal voters of a common school district shall petition the board to do so, a special meeting may be called, and the question of providing free text-books shall be submitted to the voters; if a majority vote be in favor of free text-books, the board shall provide for same, payment to be made from the school funds of the district.

Publishers desiring to furnish text-books shall file with the State superintendent sample copies of their books and price lists at which they will be offered to trustees, certified copies of which lists shall be furnished by the State superintendent to the clerk of each common school district in the State.

Buildings.—The board of trustees shall have the general charge of the school-houses in their district, shall lease or purchase a site, may permit the school-house to be used when not interfering with school purposes, the users giving bond for \$100 and paying a reasonable rent, provided the legal voters accede to the use. No district shall in any one year levy a tax exceeding 10 mills on the dollar for the purpose of building a schoolhouse.

In independent school districts, whenever the board of education shall deem it necessary to purchase or erect a schoolhouse or houses or to purchase sites for the same, it shall call a meeting of the voters of the district and act according to their decision.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The proceeds of such lands as are or may hereafter be granted by the United States for the use of schools within each

township in this State shall remain a perpetual school fund to the State, and no portion of said lands shall be sold otherwise than at public sale. The principal of all funds arising from sales or other disposition of lands or other property granted or intrusted to this State for educational purposes shall forever be preserved inviolate and undiminished; and the income arising from the lease or sale of said school land shall be distributed to the different townships throughout the State, in proportion to the number of scholars between the ages of 5 and 21 years who have been in attendance forty days in the public schools which have had at least five months of term within the year by a qualified teacher and made the reports required by law.

Any public graded school in any city or incorporated village, or township organized into a district under the so-called township system, which school shall give preparatory instruction (see Organization, State high-school board) and shall admit students of either sex from any part of the State without charge for tuition, shall be entitled to receive the sum of \$400 annually.

Taxation.—For the purpose of maintaining public schools, a tax of 1 mill, to be known as State school tax fund, shall be annually levied upon the taxable property of the State, which shall be added to the general school fund, and they together shall be known as the current school fund, and apportioned as above provided.

The county commissioners shall also levy an annual tax of 1 mill, to be known as the local mill tax, on the amount of the assessment made by the assessors of each township, which shall be paid into the county treasury for the support of the public schools, to be apportioned by the county auditor, who shall distribute to each school district or portion thereof the amount of tax collected in said district or portion of district in his said county: *Provided*, That if in any case county commissioners shall neglect, refuse, or fail to make such levy as herein provided for, the county auditor shall nevertheless extend the same upon the assessment rolls of the year the same as if such levy had been so made by the said county commissioners. As a further provision for the support of schools, there shall be set apart by the county treasurer of each county the proceeds of all fines for breach of any penal law in this State not otherwise appropriated by law, and all moneys arising from the issuing of liquor licenses and from unclaimed moneys arising from the sale of estrays. And the county auditor shall open an account with each district or portion of district in his county, and keep an accurate account of all moneys received by or due to each of said districts, and all such matters as are necessary to show the condition of accounts between each of said districts and the county treasury, and for this purpose he shall examine any and all of the books in the office of the county treasurer.

There shall be levied annually for school district purposes, in addition to the general tax of 1 mill, such sum as may be voted at any legal meeting of the qualified voters of the district, the rate of which shall not exceed 15 mills, for the support of the school (provided it will support the schools for the legal term), or 1 per cent for the erection of a schoolhouse.

MISSISSIPPI.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State superintendent—State board of examiners—County superintendent—County school board; school districts—District trustees—Separate school districts.

State board of education.—The State board of education consists of the secretary of state, attorney-general, and State superintendent, and shall have charge of the management and investment of school funds, and shall regulate all matters arising in the practical administration of the school system not otherwise provided for. The State superintendent and one other shall constitute a quorum. Meetings shall be held at the seat of government at such time as the board shall determine, and one member may call a meeting at any time. The board shall appoint county superintendents (which see) in certain counties, and decide finally appeals from State or county superintendents, except those pertaining to examinations. (See State board of examiners.) They may suspend for neglect of duty county superintendents appointed by them, and for continued

neglect of duty, drunkenness, incompetency, or official misconduct may remove such a superintendent after ten days' notice and an opportunity to make defense. Said board shall audit all claims against the common school fund and the expenditures of the State superintendent's office. They may adopt a course of study to be pursued in the schools, and may designate a day to be observed as Arbor Day.

State superintendent.—The State superintendent of public education shall be elected at the same time and in the same manner as the governor, to hold office four years. He shall keep his office in the capitol, and give \$5,000 bond. He shall have general supervision of the public free schools, and may prescribe such rules and regulations for the efficient organization and conduct of the same as he may deem necessary. He shall preside over all the meetings of the State board of education; solicit reports from all educational institutions of the State, public and private; apportion semiannually the State common school fund to the several counties and separate school districts, according to the number of educable children enumerated, and shall furnish a copy of said apportionment to the State auditor and treasurer, to each county superintendent and treasurer, and to the treasurer of each separate school district; and shall not act as agent of any publisher or bookseller, nor receive any gift or reward for recommending any book, furniture, or school apparatus, under penalty of removal from office and forfeiture of all moneys due him from the State. He shall appoint the State board of examiners (which see), and shall be ex officio a trustee in the State University, the Agricultural and Mechanical College, the Industrial Institute and College, the State Normal School, and the Alcorn Agricultural and Mechanical College. He shall keep a complete record of his official acts and those of the State board of education. Biennially, by January 10 of each year in which the legislature meets, he shall have printed a report showing the receipts and disbursements of the common school fund; number of school districts, schools, teachers, pupils, attendance of pupils, and studies pursued by them; financial condition of the schools, their receipts and expenditures, value of schoolhouses and other property, cost of tuition, and salaries of teachers; the educational and financial condition of the normal and higher institutions connected with the State school system, and, as far as can be ascertained, of private schools, academies, and colleges, together with such other information and recommendations relating to educational interests as he may deem important. He shall have the school laws printed, together with forms for conducting school business, the rules and regulations adopted by the State board of education, questions for the examination of teachers, and such other matters of public interest that may be deemed worthy, and shall distribute same to county superintendents and other school officers interested. He shall hold conferences with the county superintendents of each judicial district, or of several judicial districts combined, at such time and place as he shall appoint; advise county superintendents on all matters regarding the welfare of the public schools; and shall render decisions on questions and controversies arising out of the interpretation of the school laws, after having submitted the statement of facts to the attorney-general for counsel.

State board of examiners.—The State board of examiners shall consist of three first-grade teachers of scholarly attainments and successful experience, appointed by the State superintendent, no two of whom shall be from one Congressional district. They shall aid the State superintendent in preparing all examination questions for the teachers of the State, grade papers of applicants for professional and State licenses, and hear and decide all appeals from teachers or county superintendents regarding examinations. Each applicant or candidate for county superintendent shall be examined by said board in his own county, under regulations passed by the State board of education. Each member of said State board of examiners shall serve four years, unless removed by the State superintendent for cause. As compensation they shall receive \$5 from each applicant for a professional license, \$5 from each applicant or candidate for county superintendent, and 50 cents from each applicant for State license. (See also Teachers—Certificates.)

County superintendent.—In each of the counties of Adams, Hinds, Sunflower, and Washington a county superintendent of education shall be appointed by the State board of education, by and with the advice and consent of the senate, and in each of the other counties a county superintendent shall be elected by the people. His term of office shall be four years, and to be eligible he must be 21 years of age, a qualified elector, a resident of the State four years and of the county two years, and shall have passed an examination in first-grade subjects

and school law. (See also State board of examiners.) He shall not teach in any school during his term of office; shall give bond in a sum from \$500 to \$2,000, as determined by the board of supervisors, and shall keep an office at the county seat, which shall be provided by the supervisors and furnished with necessary supplies from the school fund.

He shall employ teachers recommended by the local trustees (and shall himself select and employ teachers for schools whose trustees fail to report a selection within ten days of the time fixed by the county board for the beginning of the term), fix their salaries, and make contracts with them; examine teachers' monthly reports, requiring that a majority of the trustees certify to the accuracy of the same, and shall thereupon issue the teacher's pay certificate, in the form prescribed by the State board of education; enforce the course of study adopted by the State board of education and the uniform text-books adopted by the county; administer oaths in school matters, and take testimony in appeal cases under the school law; distribute promptly all reports, laws, forms, circulars, and instructions which he may receive from the State superintendent for school officers and teachers; preserve carefully all reports of school officers and teachers, and at the end of his term deliver to his successor books, records, and papers pertaining to his office; make an annual written report to the board of supervisors, and mayor and aldermen of a municipality constituting a separate school district, indicating the name, sex, and color of the teachers employed during the year, number of months taught by each, and the aggregate amount of pay certificates issued to each and to all. He shall keep in his office and carefully preserve the public school record provided, enter therein the proceedings of the county school board, decisions on appeal cases, and other official acts; a list of teachers examined, licensed, and employed; record the data of monthly and term reports of teachers and annual reports of county and district treasurers; and from the summaries of records thus kept render a report to the State superintendent by October 20 each year, or forfeit \$50. He shall be at the county seat on Saturdays to receive monthly reports, issue pay certificates, and attend to other official duties, or else forfeit \$10 for each such day's absence without leave previously granted by the board of supervisors, unless prevented by illness or other unavoidable cause.

He shall visit each school of his county at least once during each term, in county schools correcting any defect in classification of pupils or the government of the school, and in separate districts he shall call attention of trustees to such deficiencies for correction by them; note the condition and value of building, lot, and furniture, the branches taught, methods, and his estimate of the ability of the teacher; examine classes, and give such directions and recommendations as he may deem expedient; and urge patrons to provide comfortable and well-furnished schoolhouses. For every school not so visited the supervisors shall deduct \$10 from his salary.

He shall decide controversies arising under the school law. From his decision appeal may be taken to the State superintendent. He shall enforce the law, rules, and regulations in regard to the examination of teachers, and for incompetency, neglect of duty, immoral conduct, or other disqualification may suspend or remove any teacher or trustee from office, except in separate school districts; and for intemperance, immoral conduct, brutal treatment of a pupil, or other good cause may revoke the license of a teacher.

The salary of the county superintendent is fixed at 3 per cent of the total school funds received annually by the county, not to exceed \$600 nor be less than \$150 a year, but the board of supervisors may increase the same not to exceed 5 per cent of the school fund nor more than \$800. Any county superintendent (or other county officer) who shall trade or speculate in teachers' warrants or pay certificates, purchasing same at a discount, or loaning or advancing thereon, shall be subject to a fine of from \$100 to \$500.

County school board—School districts.—The county school board shall consist of one member from each supervisor's district, appointed for four years by the county superintendent, subject to ratification by the supervisors, and shall receive \$3 for each day of actual service, not to exceed three days in any year. The county superintendent shall be ex officio president of the board. The board shall define the boundaries of school districts (outside of special districts) or make alterations therein and designate the location of the schoolhouse in each district if not already located, paying due regard to the larger water courses and using them as boundary lines whenever practicable. A regular school district shall contain not less than 45 educable children, except where too great distance or impassable obstructions would debar children from school privileges,

in which cases the board may establish a regular district containing not less than 15 educable children. Special districts containing not less than 10 educable children may be established for such children as live between the forks or bends of large streams or other impassable obstructions which render it impracticable to establish regular districts; but when less than five children attend school in a district the school shall be discontinued by the county superintendent at the end of any scholastic month.

District trustees.—There shall be three trustees for each school district (except separate school districts), elected by the patrons of the school for a term of three years, one to retire each year; vacancies may be filled by the county superintendent. The trustees shall be patrons of the school, and able to read and write; and if a trustee refuse to discharge the duties of his office or to patronize the school, the office becomes vacant. The trustees shall elect teachers, and shall scrutinize the enumeration of educable children attending as made by the teacher, and certify the same in the teacher's register, which enumeration and certification shall guide the county superintendent in determining the teacher's salary for the ensuing year. One or more of their number shall visit the school at least once a month; they shall make provision for fuel and other things needful for the comfort and welfare of the pupils, and shall protect and care for the school property during vacation. They may suspend or expel a pupil for misconduct, and shall arbitrate difficulties arising between teacher and pupils, but either party may appeal to the county superintendent and from him to the State board of education.

Separate school districts.—Any municipality of 300 or more inhabitants which shall maintain a free public school at least seven months in each scholastic year shall be entitled to the rights and privileges of a separate school district. The schools of said districts shall be under the control of five trustees, patrons of said schools, who shall be elected by the mayor and board of aldermen, or in the manner prescribed by said board, for terms of three years.

The powers and duties of said trustees are: To prescribe and enforce rules, consistent with law and those of the State board of education, for the government of themselves and the schools; manage and control school property within their districts, and employ janitors; enforce the course of study and text-books adopted by proper authority; enforce the rules prescribed for the government of school libraries, and appoint librarians therefor, excluding therefrom all publications of a sectarian, partisan, or immoral character; suspend or expel pupils for misconduct; visit every school in their district at least once a month, examining carefully into its management, condition, and wants; maintain all schools under their control for an equal length of time during the year; furnish blackboards and other necessary furniture; elect a superintendent, if required, and principal for each of the schools, and prescribe their powers and duties; elect teachers, fix their salaries and terms of service and penalties for neglect of duty, but they can not contract with a teacher or principal who does not hold a license from the county superintendent; require the principal of each school to keep the records so as to show, by age, race, and sex, the enrollment, attendance, and average attendance, and at the end of the term to make complete report to the trustees showing the above and such other statistics as may be required of the county superintendent for his annual report to the State board of education, which report the secretary of the trustees shall transmit to the county superintendent within ten days after the close of the term. (See also Schools—Character of instruction—High schools.)

2. TEACHERS.

Examinations—Certificates—Contracts and salaries—Duties—Preliminary training—Institutes.

Examinations.—Two first-grade teachers, to be appointed annually, one by the county school board and one by the board of supervisors, shall, with the county superintendent, constitute an examining board for each county. The members of said board shall not be related by affinity or consanguinity, and no teacher of a normal or training school shall be appointed thereon. Said board shall conduct all examinations of teachers, and review and grade the examination papers submitted. The teachers upon the board shall each receive \$2.50 per day of actual service in holding examinations and 25 cents additional for grading the papers of each applicant, payable from the school fund as teachers' salaries are paid.

Examinations shall be held separate for the two races. The State superintendent shall prepare questions and send same sealed to the county superintendent, to be opened in the presence of those to be examined after they shall have assembled in the examination room.

Certificates.—It shall be unlawful for any county superintendent or trustees to contract with a teacher who does not hold a license valid for the scholastic year in which the school is to be taught and of a grade sufficiently high to meet the requirements of the school. Before a license shall be granted the applicant must furnish the county superintendent satisfactory evidence of good moral character and of ability to govern a school.

To obtain a first-grade license the applicant must be examined in spelling, reading, practical and mental arithmetic, geography, English grammar and composition, history of the United States and of Mississippi, elements of natural philosophy, civil government, elements of physiology and hygiene with special reference to the effects of alcohol and narcotics; and to obtain a second-grade license the applicant must be examined in spelling, reading, mental arithmetic, elementary geography, elementary English grammar and composition, and primary United States history and physiology. Licenses shall be granted to those who make a general average of 75 per cent with not less than 50 on any subject, except that a third-grade license may be granted to an applicant who shall average not less than 60 on second-grade subjects, with not less than 40 on any subject. Second and third grade licenses shall be valid for one year; licenses of the first grade, with a general average of 85, shall be valid for two years; with a general average of 90, three years; and the second such three-year license shall be renewable in the county where issued as long as the holder desires to teach; and any teacher who shall have taught under a first-grade license for five consecutive years shall be exempt from further examination. Applicants shall be at least 17 years of age, nor shall a license for more than one year be issued to an applicant who has had less than six months' experience in teaching. The State board of education may grant special examinations (fee, \$2) for licenses which shall be valid only until the next regular examination. When a teacher desires to have his license transferred to another county he may have the county superintendent forward his papers to the State board of examiners, and if the grading of the county board is sustained by the State board the license may be transferred to any county which the applicant may designate. Applicants shall pay a fee of \$1.50 to the State board of examiners for grading their papers.

The State board of education may issue professional licenses to teachers of recognized ability, moral character, and scholarly attainments who shall pass a satisfactory written examination in algebra, geometry, rhetoric, English literature, elements of botany and chemistry, science of teaching, civil government, and Latin through Caesar and Virgil. Such licenses shall be valid for life.

A teacher with a third-grade license shall not be principal of a school which requires an assistant, and in schools requiring more than two assistants the principal must have a first-grade license.

Contracts and salaries.—The county (or city) superintendent shall enter into duplicate written contract with each teacher, which shall specify the name of the school, the position of the teacher, whether principal or assistant, and the monthly salary. In addition to the fixed salary, there shall be stated in the contract two successively smaller amounts, which shall be the salary in case the attendance decreases to a number for which the conditional amounts would be the fixed salary. It shall be unlawful to issue a [pay] certificate for services rendered before the contract is made and signed.

Superintendents shall fix the salaries of teachers so that the amount to be paid in salaries for maintaining all the schools for one month shall not exceed that fractional part of the whole school fund which one month is of the whole number of months the schools are to be taught. Salaries for schools requiring one teacher shall be fixed between the following limits: For a third-grade teacher, between \$15 and \$20; second-grade, \$18 to \$30; first-grade, \$25 to \$55. In fixing same the superintendent shall take into consideration the executive and teaching capacity of the teacher and the size of the school, to be determined by the educable population of the district and the average attendance of the two preceding years. The salary of an assistant shall not exceed by more than \$5 the minimum fixed as above for the grade of license he holds if second or third grade, nor by more than \$10 if first grade, but the salary of an assistant may be lower than said minimums. In schools requiring more than one teacher the salaries of principals and assistants shall be regulated so that the cost per pupil

shall not materially vary from the average cost per pupil in schools having but one teacher. The superintendent shall have power to allow one teacher to every 50 educable children in a school district, but may grant an assistant in a school having more than 40 pupils in actual attendance, or two assistants if more than 80 pupils in actual attendance; but in schools of more than 100 pupils, only one teacher shall be allowed for every 35 pupils.

Duties.—The principal teacher in a public school shall keep a daily record of such facts as the form of the register requires, and shall be responsible for the safe keeping and delivery of the register to the county superintendent at the end of the term, and the county superintendent shall not issue a pay certificate for the last month taught until the teacher shall have delivered such register in good order and properly filled out. The register shall show the name, age, and sex of each pupil attending, and the names of absentees for each day. At the end of each scholastic month the teacher shall report to the county superintendent the name, age, sex, and number of days' attendance of each pupil during the month. At least two trustees shall certify thereto, and upon receipt of same the county superintendent shall issue to the teacher and assistant, if any, a pay certificate. If the trustees, without good cause, refuse to sign the report, the teacher may appeal to the county superintendent, who may issue the certificate without the signature of the trustees. With the last monthly report of the session the teacher shall make a term report.

Preliminary training.—The Mississippi Industrial Institute and College, the purpose of which is the moral and intellectual advancement of the white girls of the State, maintains a department for training in normal school methods and kindergarten. The State normal school for colored youth is under the control of five trustees, appointed biennially by the governor and confirmed by the senate. The aim of the institution is the training of colored persons of both sexes as teachers in the common schools.

Institutes.—In every county having more than fifteen school districts for either race there shall be held annually for each race a separate teachers' institute for a term of not less than five days. These institutes are under the direction of the State board of education, who may name a list of experienced and competent institute conductors from which the board of examiners in each county shall select a conductor. Regulations and outlines of work shall be prescribed by the said State board, who shall determine the amount to be paid for conductors and incidental expenses, and shall require of the county superintendent full reports of the work, attendance, and expenses. A fee of 50 cents is paid by each applicant for examination for a teacher's certificate, and if license is issued for more than one year, 50 cents additional for each year's duration of the license. If the amount of the institute fund be insufficient, the State board of education may empower the county superintendent to draw on the county common school fund for not exceeding \$40 in any scholastic year to make up the deficit. If there be a surplus in the institute fund the county superintendent may spend 20 per cent of such fund in the purchase of works on teaching, to be kept by him for the use of teachers.

3. SCHOOLS.

School terms—Attendance—Character of instruction—Text-books—Buildings.

Schools shall be kept in continuous session four months, and as much longer as the school fund will maintain them; trustees may, however, with the consent of a majority of the patrons, divide the session and have a portion of it taught in either term. The county school board shall fix the day for the opening of the winter term between the first Monday in November and the second Monday in January, and the summer term on the first Monday in May, or as soon thereafter as they deem suitable, said action in all cases to be at least twenty days before the opening of the term, whereupon the county superintendent shall notify the secretary of the board of trustees of each school in the county. The trustees in city districts fix the dates for the opening and closing of their schools. Twenty days of actual teaching shall constitute a school month, and trustees shall determine the number of hours which shall constitute a school day—not less than five nor more than eight.

Attendance.—The districts shall be so arranged as to place all children within reasonable distance of a schoolhouse, and one public school shall be maintained in each district, but may be discontinued at the end of any scholastic month when less than five attend. Children residing in one district may attend in another, with the written consent of the trustees of both districts and the county

superintendent; but pupils shall not be allowed to attend more than one term during the scholastic year. In districts containing not more than one chartered institution of learning the board may locate the public school at the site of same, and the public school shall be conducted in accordance with the rules and regulations of the chartered institution, and the trustees of the public school and the trustees of the chartered school shall in joint session elect teachers for the public school.

Character of instruction.—The branches of study upon which teachers are required to be examined (see Teachers—Certificates) constitute the curriculum of the free public schools.

Educable children may attend a high school or college in their county, and shall be enrolled, reported, and paid for as resident pupils of the district if the school has been established as a free public school of the county. A tuition fee may be charged all pupils who pursue studies beyond the public school curriculum.

A separate (city) school district may make its schools graded schools; and graded schools may be of two kinds—grammar schools and high schools. In every graded school there shall be a graded grammar school, including the common school curriculum; and the high school shall be composed of pupils who shall have passed through the grammar-school grades or shall have passed an examination therein. The course in such high school shall be completed in three years, and the trustees may fix reasonable tuition fees, or the same may be free; and they may prescribe what other studies may be taught in the high school.

Text-books.—The county school board shall appoint five teachers of recognized ability, and the superintendent two, who shall constitute a committee for selecting a uniform series of text-books. They shall serve five years, and books shall be selected for five years. The county superintendent is ex officio secretary of the committee, shall record its proceedings, and shall fill any vacancy occurring in said committee. He shall contract with publishers for books adopted, the form of contract and amount of publishers' bond to be fixed by the State board of education, which contracts shall specify prices for exchange, introduction, and permanent supply. The books adopted shall be used by all schools in the county, except in city districts, the trustees of which shall adopt books for use therein. Instruction shall not be given in any branch to a pupil who is not supplied with the books adopted for that branch. The State board shall provide for the adoption of a text-book on any additional branch which may be added to the curriculum.

Buildings.—Any pupil who willfully defaces or injures any school property is liable to suspension or expulsion, and his parents or guardians shall be liable for all damages. Any one disturbing a public school shall be fined not less than \$10 nor more than \$50.

4. FINANCES.

There shall be a common school fund, which shall consist of the poll tax (which is to be retained in the counties where collected) and an additional sum from the general fund in the State treasury, which together shall be sufficient to maintain the common schools for the term of four months of the year. The fund shall be distributed among the counties in proportion to the educable children in each. Any county or separate school district may levy an additional sum to keep the schools open for a longer period than four months.

MISSOURI.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—State library board—County commissioner of public schools—County superintendent—County board—District directors—City, town, and village directors.

State board.—The State superintendent, governor, secretary of state, and attorney-general shall form the State board of education, which shall have general supervision over the entire educational interests of the State. The board shall report to the general assembly concerning its proceedings.

State superintendent.—There shall be elected by the qualified voters of this

State at the general election every four years a State superintendent of public schools, who shall give bond with sureties in the sum of \$10,000. He shall reside at the seat of government and keep the records and other accumulations of his office in an office furnished by the State, where he shall be found when not called thence by public business. He shall exercise such supervision over the educational funds of the State as may be necessary to secure their safety and correct application and distribution according to law; require of county clerks or treasurers, boards of education or other school officers, recorders and treasurers of cities, towns, and villages copies of all records by them required to be made, and also such other information in relation to the funds and condition of schools and the management thereof as may be deemed important; cause copies of the law and instructions to be printed and distributed, as well as all blanks that may be necessary; examine teachers and grant certificates of qualification to those who pass a satisfactory examination, but the applicant shall not be charged a fee; may employ a chief clerk at a salary of \$2,000; shall make an annual report to the general assembly when in session and on the following year to the governor, in which he shall present a statement of the condition and amount of all funds and property appropriated to purposes of education, the number of schools in the State, the number and sex of pupils attending the schools, the branches taught, the number of teachers employed, the average amount of wages paid to teachers, the number of teachers' institutes formed and their condition, the number of teachers engaged in teaching within the State who have been trained for not less than six months in either of the State normal schools, the estimates and accounts of the expenditures of public school funds of every description, plans for the improvement and management of public schools, and such other matters as he may deem important; but no such report shall exceed 200 pages of printed matter of ordinary book form. He shall annually spend at least five days in each Congressional district conferring with the board of education and other school officers, counseling teachers, visiting schools, and delivering lectures. All reasonable sums expended by him in the execution of his duties shall be allowed him on due proof.

State library board.—This board consists of the State superintendent of public schools and 4 other members appointed by the State board of education. The board compiles a list of school library and reference books, from which all school boards must supply their schools. The library board enters into contract with publishers as to prices and terms of supply, etc. Every district board and board of education shall spend out of the incidental funds annually not less than 5 cents and not more than 20 cents per pupil enumerated in the district each year in supplying and maintaining these supplementary and reference libraries. By vote of district this amount may be increased.

County commissioner of public schools.—There shall be elected every two years a county commissioner of public schools, who shall be at least 21 years of age, a resident of the county for at least one year prior to his election, and shall hold a first-grade county, normal, or State certificate entitling him to teach in the public schools of such county. The county commissioner is chairman ex officio of the county board of education. He shall condense and forward to the State superintendent the educational statistics of the county, and see that the local authorities are supplied with copies of the school law and blanks. He shall receive for making his reports and perfecting the record of his office, in counties of less than 10,000 inhabitants, \$20; 10,000 to 15,000, \$30; 15,000 to 20,000, \$35; 20,000 or more, \$40.

County superintendent.—Whenever the inhabitants of any county in this State may desire to establish county school supervision, the matter may be accomplished by 100 freeholders petitioning the county court for the same, and the court shall order an election. The county superintendent shall give bond, with sureties in double the amount of his salary, and shall keep his office and its records, etc., at the county seat, where a room shall be provided for him, with stationery, postage, etc. He shall have general supervision over all the schools of his county, except in cities having more than 1,000 children and organized as a city school district, and shall perform all the duties now required by the county commissioner and county board of education and receive like compensation therefor. He shall visit each school district in his county as often as practicable, examining the records, the character of instruction, and the condition of school property; and shall (privately) advise the teacher in matters calling therefor, consult with the district clerks and examine their accounts, organize a county teachers' association, hold public meetings in each township

in the county annually for the purpose of discussing educational questions of all kinds, formulate a course of study and a plan for grading the schools of his county, and require the same to be observed as nearly as practicable. His compensation shall be as follows: In counties wherein the number of children of school age is less than 2,000, he shall receive \$200; from 2,000 to 3,000, \$300; from 3,000 to 4,000, \$400; from 4,000 to 5,000, \$500; from 5,000 to 6,000, \$600; from 6,000 to 7,000, \$700; from 7,000 to 8,000, \$800; from 8,000 to 9,000, \$900; and for 9,000 or more, he shall receive \$1,000.

County board.—The county board of education consists of the county commissioner of schools, one member appointed by the county court and one member appointed by the State board of education every two years. This board holds three regular teachers' examinations each year for certificates on fourth Saturdays and preceding Fridays in March, June, and August; questions furnished by the State superintendent. It adopts a course of study for all the rural and village schools in the county and has authority to enforce its use. It holds a three days teachers' association in September, October, or November of each year.

District school directors.—Each county is divided into districts, which may be modified by the voters of the locality interested. The qualified voters at the annual school meeting shall have power by a majority to choose by ballot one director, who shall hold his office for the term of three years; to fill vacancies caused by his death, resignation, removal, or change of residence; determine the length of term in excess of six months that the schools shall be taught; determine the rate of taxation; vote such sum as may be deemed necessary for the purchase of books for a district library; direct the sale of any school property; vote for county commissioner or superintendent; determine the amount to be levied to purchase school site and erect school buildings.

The government and control of the district shall be vested in a board of directors, composed of three members, who shall be citizens of the United States, resident taxpayers for one year, and qualified voters of the district. The directors shall be elected by the voters and shall hold for the term of three years, one retiring annually; vacancies are to be filled by the other members, but if they fail to agree or there is more than one vacancy, the county commissioner shall fill the vacancy or vacancies. The board shall annually take an accurate census of persons 6 to 20 years of age (by race and sex), with the full name and post-office address of parent, on penalty of \$100 for falsification; shall have the care and keeping of the schoolhouse and other property. It shall furnish libraries, maps, globes, and other necessary apparatus; regulate the organization and government of the schools; shall have power to employ legally qualified teachers; shall visit the schools; may remove the district clerk for dereliction of duty; shall annually estimate the amount of funds necessary to sustain the schools for the time required by law or by the district, together with the amount required for building and other expenses.

City, town, and village schools.—Any city, town, or village having filed a plat in the recorder's office, or any districts having 200 or more children of school age, may be organized into a special or consolidated school district, to be governed by the same general laws as other school districts. Whenever it is desired to organize a city, town, village, special, or consolidated district the question shall be submitted to the voters; and if the vote is affirmative, six directors shall be elected, each for three years after the first election, two to retire annually. (Such directory is called the board of education. It has more authority than a district school board in levying higher rates of taxation, in maintaining longer terms of school, and in establishing and maintaining high schools.)

The school board of any city having more than 50,000 inhabitants may relieve itself of the duty of enumeration for four consecutive years by passing a resolution each year adopting the last enumeration.

2. TEACHERS.

Appointment—Certificates—Duties—Preliminary training—Associations.

Appointment.—Boards of directors shall contract with persons holding teachers' certificates in full force for the time for which the contract is made, and anyone who shall enter a public school in this State to teach, govern, or discipline the same without being legally authorized shall be fined not exceeding

\$100, as shall also any director indorsing or encouraging such unlawful act. The board shall not appoint one of its members as teacher, nor shall a teacher serve as clerk to the board.

Certificates.—It shall be the duty of the county board to examine all persons presenting themselves for examination at the regular times fixed by law, and, if found qualified, to grant them certificates good in the county; examination fee, \$3. The State superintendent may examine teachers and grant certificates good anywhere in the State until revoked.

County superintendents and boards are authorized to issue three grades of certificates. Third-grade certificates, good for one year, shall be granted to persons of good moral character who shall pass a satisfactory examination, with a general average of 80, in arithmetic, language lessons, English grammar, geography, spelling, reading, penmanship, United States history, civil government, physiology and hygiene with special reference to the effects of alcoholic drinks and narcotics, and elementary pedagogy. For a second-grade certificate, valid for two years, the general average must be 85, including the following additional subjects: Elementary algebra and two years of high school English. For a first-grade certificate, valid for three years, the applicant is required to have had one year's experience and to make a general average of 90 on the aforementioned subjects, with the addition of one branch of science and one division of general history. No certificate shall be issued to an applicant failing to make 60 in any branch. Third-grade certificates may be renewed once, second-grade twice, and first-grade an indefinite number of times, without reexamination or fee, on condition that the holder has taught the previous year and is a regular attendant at the county teachers' association.

Other duties.—It shall be the duty of every teacher to keep a daily register and make monthly and term reports to the district clerk, giving the number of pupils (by sex) in attendance during the month, the average attendance, and such other statistics as the directors may require, and no warrant shall be ordered by the board for the month's salary until such reports have been filed when due. The term report must show list of pupils enrolled during the term, indicating the amount and character of work done by each in the official course of study. Every teacher shall attend the teachers' county association.

Preliminary training.—The following provisions apply to the normal departments of the University of Missouri and Lincoln Institute (for colored persons), as well as to the State normal schools proper: The normal diploma, conferred upon pupils completing the advanced course, shall entitle the holder to teach in any county in the State without further examination until revoked for cause. The normal certificate, granted upon completion of the elementary course, shall bear the names of the branches of study completed and the grade obtained in each, and shall entitle the holder to teach such branches for two years.

Grades made in the summer terms of State educational institutions and other summer schools approved by the State board shall be taken in lieu of examination by county boards and superintendents in such subjects as may be designated by the State superintendent.

Associations.—There shall be held in each county, in September, October, or November each year, a teachers' association, for three days, under the direction of the county board of education. (See also Certificates—Other duties.)

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Separate free schools shall be established for the education of children of African descent, and it shall be unlawful for any colored child to attend a public school for whites or for a white child to attend a school for colored children. When there are within any school district in this State 15 or more colored children of school age, the district board shall maintain a separate free school for such colored children, and the length of the school term for the colored school and their advantages and privileges shall be the same as those enjoyed by white children in schools of corresponding grade. The board shall in all cases conduct, manage, and control the school as other schools of the district are conducted, managed, and controlled; and all indebtedness incurred by the board in providing suitable buildings, employing teachers, and maintaining schools shall be paid out of the appropriate funds of the district.

The board shall provide a suitable building and furnish the same, using the building or incidental funds of the district; but should the average daily attendance of colored children for any one school month be less than 8, then the board may discontinue the school for not more than six months at any one time.

In school districts the annual meeting shall determine by ballot the length of school term for children 6 to 20 years of age in excess of six months that the public schools of the district shall be maintained for the next scholastic year. The district board is required to continue the public schools for six months in each scholastic year. Should any board fail to comply with these provisions, the district shall be deprived of any part of the public school moneys for the ensuing year. City, town, and village schools shall continue for not less than seven months when it will not increase the estimated expenditure to an amount exceeding 40 cents on the dollar.

Character of instruction.—The school board shall have power to make all needful rules and regulations for organization, grading, and government. In counties having county supervision the county superintendent, and in other counties the county board of education, shall formulate a course of study and a plan for grading the schools of the county, and forward a copy of same to each district clerk and each teacher, and require the same to be followed as nearly as practicable. There are no restrictions on branches of knowledge that may be taught or grade of instruction that may be given, if the voters of the district, in regular form, consent to pay for it and raise the taxes for that purpose.

Text-books.—The State auditor, attorney-general, State superintendent, president of the State Normal School at Kirksville, and one practical public school teacher to be appointed by the governor, constitute the school-book commission, each of whom shall receive \$5 per day and actual traveling expenses for the time they are in session, not to exceed thirty days. They shall advertise for bids from reliable publishing houses, and each house bidding shall submit a copy of the book or books proposed to be furnished, and a deposit of \$500 to cover costs and damages in the event of failure to enter into contract in case such bid be accepted by the commission. Upon opening of bids the commission shall proceed to select the cheapest and best course of text-books so offered, such list to include books needful for high schools on all subjects which the commission think necessary; and contracts shall be entered into with the publishers of such books to supply same for five years, stating price at which books will be supplied to dealers and citizens and terms upon which exchanges of new for old books will be made, and publisher shall execute a bond of \$10,000 for the faithful performance of such contract. No text-books except those contracted for by said commission shall be used or taught in the public schools of the State nor sold for use in said schools; and any school director who shall sanction or permit the use of other books (except for supplementary reading) shall be fined from \$5 to \$25. Directors may purchase at the expense of the district sufficient books for children whose parents are unable to buy them.

Cities having 50,000 or more population are not subject to this law.

Buildings.—The annual meeting of the district fixes the location of the schoolhouse in new districts, and for the purpose of erecting schoolhouses and furnishing them the board of directors of cities, towns, or school districts are authorized to borrow money and issue bonds if directed by their constituents. The board of directors shall have the care and keeping of the schoolhouse and other property belonging to the district, and shall provide the necessary libraries, supplementary books, maps, etc., keep the building in good repair and supplied with fuel, etc. The schoolhouse may be used for religious or agricultural, educational, or labor meetings if ordered by the voters. Every person who shall willfully injure or destroy any building used as a schoolhouse or for other educational purposes, or any furniture, fixtures, or apparatus thereto belonging, or who shall deface, mar, or disfigure the building or any of its appurtenances, shall be fined a sum double the damage done, and \$10 to \$50 for any pasting, painting, or cutting upon the building.

When the demands of a city, town, or village or consolidated district require more than one public school building, the board shall, as soon as sufficient funds have been provided, establish an adequate number of primary or ward schools, corresponding in grade to those of other public school districts, and for this purpose the board shall divide the district into school wards and fix the boundaries thereof, and erect a suitable school building thereon and furnish the same.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The proceeds of all lands that have been or hereafter may be granted by the United States to the State and not otherwise appropriated by the State or United States; all moneys, stocks, bonds, lands, and other property now belonging to any State fund for education; the net proceeds of the State tobacco warehouse, and of all sales of lands and other property and effects that may accrue to the State by escheat or from unclaimed dividends or distributive shares of the estates of deceased persons, or from fines, penalties, or forfeitures; any proceeds of the sales of public lands which may have been or hereafter may be paid over to the State (if Congress consent); also other grants, devises, or gifts that may be or may have been given to the State and not otherwise appropriated by the State or the terms of the grant, devise, or gift, shall be paid into the State treasury and securely invested and sacredly preserved as a public school fund, the annual income of which, together with 33½ per cent of the ordinary revenue of the State, shall be faithfully appropriated for establishing and maintaining free public schools. The State superintendent of public schools shall annually apportion the public school fund among the different counties upon the enumeration of persons 6 to 20 years of age, from the treasuries of which it shall be apportioned to the districts, towns, or cities which have made the enumeration required by law.

The county fund shall consist of all stocks, bonds, etc., known as such fund, and of the clear proceeds of all penalties and forfeitures and of all fines collected in the several counties for any breach of the penal or military laws of the State as well as exemptions from military duty, the income of which shall be appropriated to the support of the public schools.

The proceeds of the sixteenth section, or other land selected in lieu thereof; the interest on such proceeds; the rents and profits of such lands, and all the public school moneys which shall be apportioned to any unorganized township arising from dividends and profits of the public school fund, shall constitute a township school fund, which shall be under the care and management of the county court.

Taxation.—For school purposes in districts school boards may levy an annual rate of taxation on property not to exceed 40 cents on the \$100 valuation; in cities of 100,000 population, not to exceed 60 cents on the \$100; but in city, town, and consolidated districts the rate may be increased to an amount not to exceed \$1 on the \$100 of valuation, and in other districts to an amount not to exceed 65 cents on the \$100 valuation, if a majority of the voters assent at an election held to decide the question. For the purpose of erecting public buildings the rates of taxation above limited may be increased when the rate of such increase and the purpose for which it is intended shall have been submitted to a vote of the people and two-thirds of the qualified voters of such school district shall vote therefor.

MONTANA.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State superintendent of public instruction—County superintendent of schools—District board of trustees—Truant officer.

State board of education.—The State board of education shall consist of 11 members, including the governor, State superintendent, and attorney-general, the others being appointed by the governor, with the consent of the senate, for terms of four years, 2 to retire annually. The board shall have the general control and supervision of the State institutions, shall grant State diplomas valid for six years and life diplomas, shall make an annual report of its proceedings, shall appoint experienced teachers to act as instructors in county institutes. The members of the board shall receive no compensation, but shall be allowed their actual traveling expenses in attending the meetings of the board.

State text-book commission.—The State text-book commission consists of seven members appointed by the governor, subject to called meetings, and having full authority to make contracts and agreements, in the name of the State,

for the supply of all text-books for use in the public schools, without further recommendations to the legislature, it being the duty of all school officers, under penalty, in their respective districts, to comply with the provisions of the law for the exclusive use of text-books adopted by said commission. Voters of each district may hold elections "for" or "against" free text-books, such books, in case of affirmation, to be paid for by special tax levy when amount in general fund is insufficient. Members of said commission to receive \$6 per session day and actual traveling expenses. (Synopsis of senate bill 54, approved March 7, 1903.)

State superintendent of public instruction.—There shall be chosen by the qualified electors of the State a superintendent of public instruction, who shall have attained the age of 30 years at the time of his election, shall have been a resident for the two years immediately preceding his election, and shall hold a State certificate of the highest grade issued in some State or be a graduate of some reputable university, college, or normal school. He shall be elected for four years and have his office at the seat of government, and shall give a bond in the penal sum of \$10,000, with not fewer than two securities. He shall preserve the matters accumulated by virtue of his office and turn them over to his successor. He shall have the general supervision of the public schools of the State, shall prepare, print, and distribute the necessary blank books and forms, shall prepare and furnish county superintendents lists of publications approved by him as suitable for school libraries and prescribe rules for the same, shall prepare all questions to be used in the examination of applicants for teachers' county certificates and prescribe the rules for conducting such examinations, shall prepare and prescribe a course of study for all the public schools of the State, shall prescribe rules for holding teachers' institutes, shall counsel with the county superintendents and when requested shall give opinions concerning the school laws and decide all appeals from them, shall once in four years at most print the school laws with annotations, shall attend and assist at county institutes, and shall make a biennial report to the legislature through the governor, which shall contain the number of districts, schools, teachers, pupils, the attendance, and the studies; the financial particulars, value of schoolhouses, cost of tuition, and wages of teachers; the educational and financial condition of the State institutions connected with the public school system, and, as far as ascertainable, of private schools, academies, and colleges of the State; finally, general matters, information, and recommendations, etc.

Fifteen hundred copies of the report of the State superintendent shall be printed. He shall apportion the State school fund among the several counties in proportion to the number of children of school age in each.

He may appoint a clerk at an annual salary of \$1,800 and a clerk at an annual salary of \$1,200, and shall himself receive \$2,500 and not more than \$500 for traveling expenses.

County superintendent of schools.—A county superintendent of schools shall be elected in each organized county for a term of two years and give bond in an amount fixed by the county commissioners.

No one is eligible unless he has a certificate of the highest county grade, has resided one year in the State next preceding his election and one year in the county, and has had twelve months' successful experience in teaching in the State public schools. He shall have the general supervision of the public schools of the county and shall carry out the instructions of the State superintendent. He shall visit every school, advising the teacher and noting in writing his judgment of her efficiency, shall decide all questions arising under the school law, shall apportion school moneys to the school districts, shall preside over teachers' institutes, and shall select suitable persons as instructors from the list commissioned by the State board. He shall act as agent of the board of trustees of the State Orphans' Home, shall see that the rules of the board are carried out with reference to any children adopted from said home within the limits of his county, and shall annually report to said board, on the 1st day of October of each year. He shall have power to issue temporary certificates, shall make an annual report to the State superintendent containing such matters as that officer may require, under penalty of the loss of a month's salary. He shall see that the district boundaries are plainly marked, shall provide himself with an office at public expense, and shall be allowed postage, stationery, and in counties of the seventh and eighth class actual necessary expenses when engaged in visiting schools within his county. He shall not engage in teaching during his term of office.

District board of trustees.—The term "school district" is declared to mean

the territory under the jurisdiction of a single board designated as "board of trustees." For the purpose of organizing a new district, a petition in writing shall be made to the county superintendent, signed by the parents or guardians of at least 10 census children residing within the boundaries of the proposed new district, but the boundaries of any district shall not be changed, except in forming new districts, unless a majority of heads of families resident therein present a petition to the county superintendent.

An annual election for the election of school trustees shall be held in each district. Districts having a population of 12,000 or more are first class, having 7 trustees; more than 1,000 and less than 12,000, second class, having 5 trustees; less than 1,000, third class, having 3 trustees, each serving three years, excepting in first-class districts of over 20,000 population, trustees serve two years, give bond of \$10,000, and are entitled to \$4 for each meeting attended, not to exceed one each week. Vacancies to be filled by appointment by the county superintendent of schools.

The board of trustees shall meet not less than once nor more than five times in each month in districts of the first class, and in all districts not less than four times each year. The board shall employ teachers and other employees, fix and pay their wages, fix the charge for the tuition of nonresident students, and fix the compensation of the clerk for time spent in the service of the district, enforce the rules of the State superintendent, provide school furniture and other essentials of the schoolhouse, rent, repair, and insure, build, or remove them; hold in trust for the district all property, expel or suspend pupils, provide books for indigent children, make an annual report to the county superintendent, report directly to State superintendent when required, determine what branches, if any, shall be added to those required by law, subject to the approval of the county superintendent; visit every school in their district at least once in each term. The board has custody of all school property, and shall provide each schoolhouse with an American flag 4 by 6 feet at least, of durable material, and the necessary apparatus for flying it. The board may issue bonds and sell them to meet maturing bonds.

In addition to the boards of trustees as above specified, there shall be a board consisting of six members, appointed by the county superintendent of schools, which, together with said county superintendent, shall constitute a board of trustees of the high school, when, after a petition of 100 freeholders of any county, an affirmative election shall establish a high school in such county. Said board shall give bonds satisfactory to the county superintendent, shall hold office for two years, members not residing in place where high school is established being entitled to mileage in attending meetings, and the board shall be governed in the matter of meetings and procedure by the provisions of the general school laws of the State.

The district clerk shall make annually a census of the persons 6 to 21 years of age, by sex, together with the names of their parents or guardians. He shall take separately a census of children under 6, by sex. He shall be paid 10 cents for each child's name obtained, and he shall receive such other compensation for other services as may be allowed by the board of trustees. If, through the failure of the clerk to take the census, the district lose its share of the annual apportionment of school money, he shall be individually liable for the amount.

In districts having a population of 5,000 and upward, the board of trustees of such district may appoint a superintendent of schools, to hold at the pleasure of the board. The person so appointed shall hold a State certificate of the highest grade issued in some State or be the graduate of some reputable university, college, or normal school, and shall have taught at least five years. He shall perform the duties prescribed by the board, and he shall not engage in any work that will conflict with his duties as superintendent.

Truant officer.—See under Schools, Attendance.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—No person shall be counted a qualified teacher who has not obtained a certificate from the county superintendent, or State certificate or life diploma from the State board of education, or a special certificate to teach either music, drawing, modern languages, or penmanship only.

The State board of education shall issue State diplomas to such persons as

have a good moral character and who have held for one year and still hold in full force and effect a first-grade county certificate, with the addition of English literature and mental science, and who shall furnish satisfactory evidence of having been successfully engaged in teaching for at least five years. The term "five years" shall be construed to mean for five years of not less than seven months each; that is, the applicant must have taught a part of each year for five years—not necessarily consecutive years—and in all thirty-five months, of which at least twenty-one months must have been in the public schools of Montana, provided that the State board of education shall have power to add such other studies to those enumerated in this paragraph as they may deem necessary.

Life diplomas may be issued upon all and the same conditions as State diplomas, except that the applicant must pass a satisfactory examination upon the rudiments of botany, geology, political economy, zoology, and general history, and must furnish satisfactory evidence of having been successfully engaged in teaching for at least ten years. "Ten years" shall be construed to mean ten years of not less than seven months each; that is, the applicant must have taught some part of each year for ten years—not necessarily consecutive years—and in all seventy months, of which at least twenty-one months must have been in the public schools of Montana.

A State or life diploma may be granted to any graduate of the State normal school of Montana or of the State University of Montana when the said graduate furnishes satisfactory evidence of having successfully taught after graduation, a public school in this State for sixteen school months. State or life diplomas may be granted to graduates of other educational institutions, within or without the State, upon conditions established by the State board of education.

The county superintendent shall hold public examinations of all persons over 18 years offering themselves as candidates for teachers of common schools at the county seat on the third Fridays in February, April, August, and November of each year by a series of written or printed questions, according to the rules prescribed by the State superintendent. If from the percentage of correct answers required by the rules and from other evidences disclosed by the examination, including particularly the superintendent's knowledge and information of the candidate's successful experience, the applicant is found to be a person of good moral character, to possess a knowledge and understanding, together with an aptness to teach and govern, which shall enable such applicant to teach in the common schools of the State, the county superintendent shall grant such applicant a certificate of qualification.

Certificates shall be of three regular grades, the first of which shall be good for three years, the second for two years, and the third grade (only issued once to the same person in the same county: *Provided*, That the State superintendent of public instruction, may, at his discretion, authorize the issuance of more than one permit to the same person within the same county) for a term of one year, according to the percentage of correct answers and other qualifications appearing from the examination. No certificate shall be granted unless the applicant shall be found proficient in and qualified to teach reading, penmanship, orthography, written arithmetic, mental arithmetic, geography, English grammar, physiology and hygiene, United States history, and theory and practice of teaching. In addition to the above, applicants for a second-grade certificate shall pass a satisfactory examination in civics of the United States and of Montana, physical geography, and elementary algebra. The examination for a first-grade certificate shall include all of the forementioned branches and also American literature, natural philosophy, and plane geometry, and the applicant must have taught twelve months acceptably. In addition to the 3 regular certificates the county superintendent may issue a temporary certificate to teach until the next regular examination to any person applying at any other time than that during which the regular examination is held, under regulations fixed by the State superintendent, but such certificate may be issued but once to the same person. Any person thinking himself unjustly treated may have his papers reexamined by the State superintendent on paying a fee of \$2.

To validate the first-grade certificate for any county in the State other than that for which it has been granted it must be registered by the superintendent of the county in which the possessor wishes to teach. Every applicant shall pay \$1 for the benefit of teachers' institute in the county. The questions forwarded by the State superintendent shall not be opened until the day of examination.

Every teacher shall make an annual report to the county superintendent, a copy of which shall be delivered to the district clerk. The teacher shall also make such other reports as may be lawfully required, and no warrant shall be

drawn for a teacher's salary until all reports have been furnished, but in districts having superintendents the reports shall be made to them. The teacher shall also keep a register in a proper manner or forfeit her last month's salary, as also enforce the course of study and obedience on the part of pupils, but any teacher who shall maltreat or abuse any pupil shall be fined not to exceed \$100.

Preliminary training.—The object of the State normal school shall be the instruction and training of teachers for the common schools of the State, the control of which shall be vested in the State board, which shall elect all teachers and employees.

Meetings.—The county superintendent in every county in which there are five or more school districts must hold one teachers' institute in each year, and every teacher employed in the county must attend the institute on penalty of losing pay, if teaching, or, if not teaching, of having certificate revoked, although such attendance, owing to the contradictory nature of the law in the premises, further rests on the permission of boards of trustees for the closing of schools during the time of such institute meeting. As to other counties the county superintendent shall confer with the State superintendent. The session of the institute shall last five to ten days. Funds for the institute shall be derived from the following sources: All moneys received from the issuance of teachers' certificates by the county superintendents, the appropriations from counties of the first class of \$150 to \$250, of the second class \$100 to \$200, of the third class \$75 to \$125, and of the fourth, fifth, sixth, seventh, and eighth classes \$25 to \$100. The State board shall appoint experienced teachers to act as instructors in county institutes.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every common school not otherwise provided for by law shall be open to the admission of all children 6 to 21 for at least three months in each year for six hours a day, exclusive of noon recess, but any board in any district having a population of five hundred or more may fix as the school day a less number of hours than six: *Provided*, That it be not less than four hours, except in the lowest primary grades, where the pupils may be dismissed after an attendance of two hours.

Every parent, guardian, or other person in the State of Montana having control of any child or children between the ages of 8 and 14 years shall be required to send such child or children to a public school, or private school taught by a competent instructor, for a period of at least twelve weeks in each year, six weeks of which time shall be consecutive: *Provided*, That such parent, guardian, or other person having control of such child or children shall be excused from such duty by the school board of the district whenever it shall be shown to their satisfaction, subject to appeal as provided by law, that one of the following reasons exists therefor, to wit:

First. That such child is taught at home by a competent instructor in such branches as are usually taught in the public schools.

Second. That such child has already acquired the branches of learning taught in the public schools.

Third. That such parent, guardian, or other person is not able, by reason of poverty, to properly clothe such child.

Fourth. That such child is in such a physical or mental condition (as declared by a competent physician, if required by the board) to render such attendance inexpedient or impracticable.

Fifth. That there is no school taught the requisite length of time within $2\frac{1}{2}$ miles of the residence of such child by the nearest traveled road: *Provided*, That no child shall be refused admission to any public school on account of race or color.

Any parent, guardian, or other person failing to comply with these provisions shall, upon conviction, be deemed guilty of a misdemeanor and fined in a sum not less than \$5 nor more than \$25 for each offense. Said action shall be prosecuted in the name of the State of Montana, before any court of competent jurisdiction, and all fines so collected shall be paid into the county treasury and placed to the credit of the school fund of the district in which the offense occurs.

In school districts having a population of 25,000 or more, there shall be established * * * an industrial school for the purpose of affording a place of confinement, discipline, instruction, and maintenance of children of compulsory

school age, who may be committed thereto according to prescribed conditions. Such schools to be established and conducted the same as other public schools. (Note.) One such school at Butte.

It shall be the duty of the district clerk of each school district, not later than twenty days after the commencement of each school term, to furnish the board of trustees with a list of names of all children between 8 and 14 years of age in attendance at school; and any district clerk failing to furnish such lists within the time specified herein shall be guilty of a misdemeanor and be liable to a fine of not less than \$5 nor more than \$25 for each offense; and such fine, when collected, shall be paid into the county treasury and placed to the credit of the school fund of the district in which the offense occurs.

It shall be the duty of the school trustees of the district to inquire into all cases of neglect of the duty prescribed in this title and ascertain from the person neglecting the reason, if any, therefor, and they shall forthwith proceed to secure the prosecution of any offense occurring under this title; and any trustee neglecting to secure such prosecution for such offense within ten days after receiving the lists mentioned above, unless the person so complained of shall be excused by the board of trustees for the reason hereinbefore stated, shall be deemed guilty of a misdemeanor and liable to a fine in the sum of not less than \$10 nor more than \$50; and such fine, when collected, shall be paid into the county treasury and placed to the credit of the school fund of the district in which the offense occurs.

In every school district having a population of 2,000 or more the board of trustees may appoint one person, who shall be designated as "truant officer," whose duty it shall be, acting discreetly, to apprehend on view all children between 8 and 14 years of age who are residents of the said district and who habitually frequent or loiter about public places and have no lawful occupation, and place such children when so apprehended in the public school. And such officer shall report all cases of truancy to his respective board of trustees immediately. Upon the receipt of such information from such "truant officer" any member of the board of school trustees shall forthwith proceed to prosecute the person so offending as prescribed. Such officer shall be entitled to such compensation as shall be fixed by the board appointing him, which shall be paid out of the school fund.

If, upon the trial of any offense as charged, it shall be made to appear to the satisfaction of the court or judge trying the same that such prosecution was malicious, then the costs in such case shall be adjudged against the complainant or person instituting such proceedings and collected as fines in other cases.

Character of instruction.—All common schools shall be taught in the English language, and instruction shall be given in the following branches: Reading, penmanship, orthography, written arithmetic, mental arithmetic, geography, English grammar, physiology, and hygiene—with special reference to the effect of alcoholic stimulants and narcotics on the human system—history of the United States, civics of the United States and of Montana. No publication of a sectarian, partisan, or denominational character must be used or distributed in any school, or be made a part of any school library; nor must any sectarian or denominational doctrine be taught therein. Attention must be given during the entire course to the cultivation of manners, to the laws of health, physical exercise, ventilation, and the temperature of the school room. Whenever the interests of the district require it the board of trustees may establish a high school, employ a principal and other teachers, and grade the school; and the board may also determine what branches, in addition to those required by law, shall be taught in the public schools, subject, however, to the approval of the county superintendent.

Buildings.—The board of trustees shall have custody of all the district school property. Any pupil who shall in any way cut, deface, or otherwise injure any schoolhouse, furniture, fence, or outbuilding, or any book belonging to other pupils, or to the district library shall be liable to suspension and punishment, and his parent or guardian for damage done. Any person willfully disturbing any public school or public school meeting shall be fined from \$10 to \$100. The national flag must be displayed on or near each schoolhouse.

4. FINANCES.

The principal of the State school fund shall remain irreducible and permanent. The said fund shall be derived from the following sources, to wit: Appropriations and donations by the State to this fund; donations and bequests

by individuals to the State or common schools; the proceeds of land and other property which revert to the State by escheat and forfeiture; the proceeds of all property granted to the State when the purpose of the grant is not specified or is uncertain; funds accumulated in the treasury of the State for the disbursement of which provision has not been made by law; the proceeds of the sale of timber, stone, materials, or other property from school lands other than those granted for specific purposes, and all moneys other than rental recovered from persons trespassing on said lands; 5 per cent of the proceeds of the sale of public lands lying within the State which shall be sold by the United States subsequent to the admission of the State into the Union, as approved by section 15 of the enabling act; the principal of all funds arising from the sale of lands and other property which have been and may hereafter be granted to the State for the support of common schools. The board of trustees, at any time when in their judgment it is advisable, may submit to the qualified electors of the district the question whether a tax, not to exceed 10 mills on each dollar on the taxable property in the district, shall be raised to purchase lots and to furnish additional school facilities for said district, or to maintain any school or schools in such district, or for building one or more schoolhouses, or for removing or building additions to one already built, for the purchase of globes, maps, charts, books of reference, and other appliances or apparatus for teaching, or for any or all of these purposes. Such election shall be called by posting notices in three public places in the district for at least fifteen days before the election, and conducted as nearly as practicable according to the provisions herein made for holding annual school elections. The notice shall contain the time and place of holding the election, the amount of money proposed to be raised, and the purpose or purposes for which it is intended to be used.

All moneys arising from the sale of town lots in virtue of the several acts of the legislature shall be paid into the county treasury for the benefit of the common schools of the school district in which such city or town is situated.

The State superintendent shall annually apportion the State school fund among the several counties of the State in proportion to the number of children of school age, and it shall be the duty of the State board of land commissioners to notify the State auditor of the amount. The county superintendent shall apportion all school moneys to the district quarterly.

No school district shall be entitled to receive any apportionment of school money which shall not have maintained a free school for at least three months during the next preceding school year, and every school district using text-books other than those prescribed by the State legislature (except for supplementary purposes) shall forfeit 25 per cent of their school fund for that year, and the county superintendent shall deduct that amount from the apportionment to be made to any district.

The board of trustees of any school district may, when authorized by a majority of the voters, submit to the electors the question of issuing bonds at a rate of interest not greater than 6 per cent per annum, but in no case shall the whole issue of bonds exceed 3 per cent of the taxable property within the district, but not to exceed in gross \$250,000.

NEBRASKA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State board of commissioners for managing school fund—County superintendent—School districts—Rural districts—High school districts—City districts—Metropolitan city districts (Omaha)—Truant officers.

The State superintendent of public instruction shall be elected biennially. He shall be furnished with an office at the seat of government, where he shall keep the records of his office, which are ever to be open to the governor, auditor, or committee of either branch of the legislature. He shall organize and, as far as practicable, attend teachers' institutes and provide proper instructors.

He shall visit such schools as he may have it in his power to visit, and witness and advise with teachers and school officers upon the manner in which they are conducted; decide disputed points in school law; prescribe forms for making all reports and regulations for all proceedings under the general school laws of the State; cause to be printed, in pamphlet form, the school laws and laws relat-

ing to the school lands, with blank forms prescribed by him, and furnish each county superintendent with a sufficient number to supply the district officers within his jurisdiction; annually submit to the governor a report containing a statement of the school funds of the State, an account of the receipts and expenditures for the purpose of schools, a statement of the condition of the common schools and other educational institutions chartered or fostered by the State, embracing the number of schools of the several grades, number and average compensation of teachers, names and compensations of county superintendents, number of pupils attending the several schools, the enumeration of youth by counties, value of schoolhouses, sites, apparatus, and furniture; a statement of such plans as he may devise for the better management of the school funds and the school system, and such other statements as he may deem expedient to communicate relating to his office and to popular education.

He shall cause his report to be printed by the State printing board, and shall deliver at the commencement of each regular session of the legislature 50 copies thereof to the senate and 150 copies to the house of representatives, and shall transmit one copy to each county and city superintendent of schools in the State and one to each State superintendent of other States. He shall, semi-annually, on or before the third Monday in June and the last Monday in December, make an apportionment of the funds which are in the treasury and which are applicable to the support of schools, which apportionment shall be based upon the enumeration of youth reported to the State superintendent by the county superintendents.

The State superintendent may appoint a deputy at a salary of \$1,500 per annum.

State board of commissioners for managing school lands.—(See Finances—Funds.)

County superintendent.—There shall be a county superintendent in each organized county, whose term of service shall be two years, and who shall be elected at the same time and in the same manner as other county officers. It shall be the duty of the county clerk to notify the State superintendent of the election of the county superintendent at the time said election is ascertained. The county commissioners, or a majority of them present at the first regular session of each year, shall determine the compensation to be paid to the county superintendent, but such compensation shall not be less than \$1,200 per annum in counties having a school population of 4,000 or more, not less than \$1,000 in counties having a school population of 2,500 and less than 4,000, not less than \$800 in counties having a school population of 1,500 and less than 2,500, and in counties having a school population less than 1,500 a per diem of not less than \$4 or more than \$5 for each day actually employed in the duties of his office, but the total compensation in this class shall not exceed \$800 per annum. The number of days necessary for the duties of his office shall be determined by the county superintendent, but the number of days so employed shall not be less than twice the number of districts in such county, and one day for each precinct thereof for the examination of teachers. The superintendent shall file in the office of the county clerk a sworn statement of his account.

The county superintendent shall examine all persons offering themselves as teachers for the public schools, shall grant certificates, and may indorse a certificate in force in any other county of any State. He shall visit each of the schools of his county at least once a year to examine carefully into the discipline and modes of instruction and into the progress and efficiency of the pupils; counsel with the teachers and district boards as to the course of study to be pursued; note the condition of the schoolhouse and appurtenances thereto; suggest places for new schoolhouses to be erected and plans for warming and ventilating and the general improvement of the schoolhouse and grounds; promote, by public lectures, teachers' institutes, and such other means as he may devise, the improvement of the schools in his county; consult with the teachers and school boards to secure general and regular attendance of the children of his county upon the public schools; receive all such blanks and communications as may be directed to him by the State superintendent and dispose of the same in the manner directed by the State superintendent; examine into the correctness of the reports of the district boards and, when necessary, require the same to be amended. The county superintendent shall be subjected to such rules and instructions as the State superintendent may from time to time prescribe, to whom he shall report annually. Whenever, by death, resignation or removal, or otherwise, the office of the superintendent shall become vacant, the county board shall have power to fill such vacancy.

He shall report the names of every blind or deaf person from 5 to 21 years of age to the superintendent of the State institution for each class, respectively.

School districts.—There are four distinct classes of school districts in this State: (1) The rural or village school district, with a board of 3 members; (2) the high school district, with a board of 6 members; (3) the city school district, (a) cities having a population of more than 1,500 inhabitants and less than 5,000, with a board of 6 members, (b) cities having a population of more than 5,000 and less than 25,000, with a board of 6 or 9 members, optional, (c) cities having a population of more than 25,000 and less than 40,000, with a board of 5 members, at a salary of \$300 each per annum, payable in monthly installments of \$25 each (South Omaha), (d) cities having a population of more than 40,000 and less than 100,000, with a board of 5 members (Lincoln); (4) metropolitan cities, with a board of 15 members (Omaha).

Rural or village districts.—There shall be elected at the annual meeting a director, a moderator, and a treasurer, each of whom shall serve for three years, and one of whom shall retire annually. The moderator shall preside at the district meetings and countersign all orders on the treasurer. The director shall be clerk of the board, take the school census, hire teachers (with the consent of another member of the board, but not employ a district school officer without consent of two-thirds of the voters), and draw orders on the treasurer. The school director of the district shall, within ten days after the annual district meeting, deliver to the county superintendent a report, under oath, showing the whole number of children belonging to the district between the ages of 5 and 21 years, according to the census taken aforesaid; and any district board neglecting to take the enumeration and make a return of the same shall be liable to said district for all school moneys which such district may lose by such neglect. Within ten days after the annual district meeting the director shall report to the county superintendent the number attending school during the year under 5 and the number over 21 years of age; whole number that have attended school during the year; whole number in the district between the ages of 7 and 15 years; whole number in the district between the ages of 7 and 15 years that have attended school not less than twelve weeks during the school year; length of time the school has been taught during the year by a qualified teacher, length of time taught by each teacher, and wages paid to each; total number of days all scholars between the ages of 5 and 21 years have attended school during the year; amount of money received from the county treasurer during the year, and the amount of money expended by the district during the year; number of mills levied for all school purposes; kind of books used in the school; number of children to whom text-books are furnished, and kind of books; amount of bonded indebtedness; such other facts and statistics as the county superintendent shall direct.

The district school board shall have the general care of the schools, and shall have the power to cause pupils to be taught in such branches and classified in such grades or departments as may seem best adapted to a course of study which the school boards of any county shall establish by the consent and advice of the county superintendent thereof, and the school board of each district shall cause a record of the advancement in each branch of study of all the pupils to be kept in a book to be provided for this purpose; and it is hereby made the duty of each district board, or of one of their number empowered by the board, to attend all meetings called by the county superintendent for the purpose of adopting or revising a course of study for the advancement of district schools, of making rules and regulations as they may think necessary for the government and health of the pupils, and of devising such means as may seem best to secure regular attendance and progress of children at school.

High school district.—Any district containing more than 150 children from 5 to 21 years of age may elect a district board consisting of 6 trustees, 2 to retire annually, vacancies being filled by the board until the next meeting of the district. The board shall have power to classify and grade the scholars in such district, and cause them to be taught in such schools and departments as they may deem expedient; to establish in such district a high school, when ordered by a vote of the district at an annual meeting, and to determine the qualifications for admissions to such schools; to employ all teachers necessary for the several schools of said district; to prescribe courses of study and text-books for the use of said schools, and to make such rules and regulations as they may think needful for the government of the schools and for the preservation of the

property of the district, and also to determine the rates of tuition to be paid by nonresident pupils attending any school in said district. It shall present annually a statement of all the receipts and expenditures and the net balance, and an estimate of the amount necessary to be raised by the district, in addition to the money received from the primary school fund and other sources for the support of the school for the ensuing year, and the district annual meeting may vote the sums to be raised.

City districts.—The territory embraced within the corporate limits of each incorporated city in the State having a population of more than 1,500 and less than 100,000, including such adjacent territory as may be attached for school purposes, shall constitute one school district, and as such shall be a body corporate and possess all the usual powers of a corporation for public purposes, may sue and be sued, purchase, hold, and sell such personal and real estate and control such obligations as are authorized by law; and the title to all school buildings or other property owned by any school district within the corporate limits of any city shall, upon the organization of the new city district under these provisions, vest immediately in the new district, and the board of education shall have exclusive control of the same for all purposes herein contemplated. All schools organized within the limits of such cities shall be under the direction and control of the board of education (for number of members of which, see School districts). Such schools shall be free to all children between the ages of 5 and 21 years whose parents or guardians live within the limits of the district, and all children of school age nonresidents of said district who may be by law allowed to attend said school without charge.

Metropolitan city districts (Omaha).—Each incorporated metropolitan city in the State, or those hereafter incorporated as such, shall constitute one school district, and as such shall be a body corporate and possess all the usual powers of a corporation for public purposes, may sue and be sued, purchase, hold, and sell such personal and real estate and control such obligations as are authorized by law; and the title to all school buildings or other property owned by any school district within the corporate limits of metropolitan cities shall, upon the organization of a metropolitan city district under these provisions, vest immediately in the new district, and the board of education (consisting of 15 members) shall have exclusive control of the same for all purposes herein contemplated. All schools erected or organized within the limits of said metropolitan cities shall be under the direction and control of the board of education, and shall be free to all children between the ages of 5 and 21 years whose parents or guardians reside within the limits of said district, and to all children of school age nonresidents of said district who may be by law allowed to attend said schools without charge.

Truant officers.—(See Schools—Attendance.)

2. TEACHERS.

Certificates—Institutes—Preliminary training.

Certificates.—The following statement shows teachers' certificates valid under the laws of Nebraska: *a*

Name of certificate.	By what authority issued.	Duration.	Where valid.	Experience required.	Scholarship requirements.	Reference to school laws, 1903.
Professional State certificate (on examination).	State superintendent.	For life <i>b</i>	State	1 year	In addition to the branches required for a first-grade county certificate (see below) examination is required in physical geography, chemistry, rhetoric, English literature, general history, intellectual philosophy, plane trigonometry, geology, and zoology.	Sections 1, 4, 5, 6, subdivision 9.
Professional State certificate (on diploma).	do	do. <i>b</i>	do	3 years in high school work in Nebraska.	Graduation from a college or university of good standing (4 years beyond high school course); first-grade county certificate issued in Nebraska.	Second proviso, section 4, subdivision 9.
Nebraska State normal life diploma. <i>c</i>	Board of education of State Normal School.	do. <i>b</i>	do	2 years if after graduation or 3 years before (or partly before).	Completion of the higher course in the State Normal School.	Section 10, subdivision 13.
Nebraska State normal diploma. <i>c</i>	do	3 years	do	None	do	Do.
Nebraska State normal certificate. <i>c</i>	do	2 years	do	do	Completion of the common school course in the State Normal School.	Section 10, subdivision 13; section 1, subdivision 10.
State normal diploma (other States).	Indorsed by State superintendent of Nebraska.	Varies	do	1 year in Nebraska.	Diploma must confer right to teach in State where issued. Applicant for indorsement must have first-grade county certificate.	Section 1, subdivision 9.
University of Nebraska permanent certificate.	State superintendent.	Life <i>b</i>	do	3 years	Graduate of University of Nebraska holding degree of A. B. or B. S., on completion of courses of instruction for the special training of teachers.	Section 1b, subdivision 9.
College or university permanent certificate. <i>d</i>	do	do. <i>b</i>	do	do	Graduate of college or university holding degree of A. B. or B. S., equivalent to said degrees of State University, upon equal conditions.	Do.
University of Nebraska, first grade.	Board of regents	3 years	do	None	Graduate of University of Nebraska holding degree of A. B. or B. S., on completion of courses of instruction for the special training of teachers.	Section 1a, subdivision 9.
College or university, first grade. <i>d</i>	Faculty and State superintendent.	do	do	do	Graduate of college or university holding degree of A. B. or B. S., equivalent to said degrees of State University, upon equal conditions.	Do.
District city certificate.	The examining committee of board of education.	Not prescribed.	Specified city district.	do	Not prescribed	Section 19, subdivision 14; section 17, subdivision 17.

First-grade county certificate.	County superintendent.	2 years	County	1 year	Examination in algebra, geometry, botany, and natural philosophy. In addition to the branches required for a second-grade county certificate (see below).	Sections 3-7, subdivision 7; section 1, 7, subdivision 9; section 6, subdivision 10.
Second-grade county certificate.	do	1 year	do	None	Examination in civil government, bookkeeping, the elements of agriculture (after July 1, 1905), blackboard drawing, and theory and art of teaching, in addition to the branches required for a third-grade county certificate (see below).	Sections 3-7, subdivision 7; sections 1, 6, subdivision 9; section 6, subdivision 10.
Third-grade county certificate.	do	6 months (or less).	Specified district.	do	Examination in orthography, reading, writing, geography, arithmetic, physiology, English composition, English grammar, and United States history.	Do.

^a By William R. Jackson.

^b No life certificate or normal diploma whatever is valid in this State after the holder has allowed three years to elapse without following some educational pursuit, unless such diploma or certificate has been subsequently indorsed by the acting State superintendent. (See sec. 4, subdivision 9; sec. 10, subdivision 13.)

^c The Nebraska Wesleyan University, the Fremont Normal School, and the Nebraska Normal College, at Wayne, issue diplomas and certificates under these provisions. (See secs. 7 and 8, subdivision 9.) Certificates valid in other counties or States may be indorsed by a county superintendent for two years or less, not exceeding original duration. (Sec. 4, subdivision 7.)

^d Doane College, at Crete, and Bellevue College, at Bellevue, issue certificates under these provisions. (See secs. 1a and 1b, subdivision 9.)

Institutes.—For the purpose of allowing teachers an opportunity to improve themselves in the art of teaching and to promote uniform methods of instruction in the public schools of the State, county teachers' institutes shall be organized and conducted annually by the county superintendents. Two or more county superintendents, with the approval of and in conjunction with the State superintendent, may organize and conduct joint institutes at such time and place and for such length of term as they may deem practicable, in lieu of the county institute. It shall be the duty of county superintendent and teachers to attend the institute of their county—or district in case of joint institutes—at least one week for the purpose of comparing notes, planning and outlining the work of the current or coming school year, and to study methods of school work and the science and art of teaching. The county superintendent may at his discretion revoke the certificate of or refuse to grant a certificate to any teacher who fails or refuses to attend the county or joint institute. Should graduates from the elementary course of the State normal school refuse to attend such institute, it shall be the duty of the county superintendent to report said refusal to the principal of the normal school, who shall revoke the certificate of said normal graduate; but the county superintendent may excuse experienced teachers from such attendance when application is made before the opening of the institute and satisfactory reasons for absence are given in writing by such teachers. (See also Preliminary training—Junior normal schools.)

Preliminary training.—The first term of the Nebraska State normal school, Peru, Nebr., opened October 24, 1867. The State normal school shall be exclusively devoted to the training of persons for teaching and managing schools and in the principles and practice of the various branches of learning taught in the public schools. It shall be under the direction of a board of education, consisting of 7 members, 5 of whom shall be appointed by the governor for a term of five years each, and the State treasurer and the State superintendent of public instruction shall, by virtue of their offices, be members of said board. The said board shall have power to appoint a principal, assistant teachers, and such other employees as may be required, to fix their compensation, and prescribe their duties and shall make regulations for the admission of pupils. The board of education shall receive no compensation for their services, but shall be reimbursed for actual expenses incurred in attending upon meetings of the board.

Any student having completed the "common school course" shall be entitled to a certificate good for two years in any part of the State; and any student completing the higher course of study in a satisfactory manner shall be entitled to a diploma entitling the holder to teach in any school for three years; any graduate of the higher course who shall after graduation teach two annual terms of school of not less than six months each, or their equivalent, and shall produce a certificate of good moral conduct and satisfactory discharge of professional duties from the board or boards of directors of the district or districts in which the applicant taught, countersigned by the county superintendent of the proper county or counties, shall be entitled to receive an additional diploma, good for life: *Provided*, That any teacher producing satisfactory proof of three years' successful teaching previous to graduation in the higher course of study may receive, upon graduation, a diploma good for life: *Provided*, That no life diploma shall be in force after its holder shall permit a space of three years to elapse without following some educational pursuit, unless said diploma be indorsed by the State superintendent: *Provided*, That each holder of a certificate from the common school course, or a diploma from a higher course, shall, before he begins to teach, register the same in the office of the county superintendent of the county in which he shall teach; and for such registration he shall pay a fee of \$1, which shall go into the institute fund of said county.

All funds appropriated for the use and benefit of the normal school, together with the income arising from the lease and sale of the endowment lands belonging to said school, shall be under the direction and control of said board of education, subject to the provisions herein contained.

All the lands remaining unsold of the 20 sections heretofore appropriated as an endowment fund for the State normal school and all the endowment fund hitherto derived from the sale of such lands shall be forever an endowment.

The legislature of 1903 passed a law providing for one additional State normal school to be located at any point west of a point not exceeding 5 miles east of the ninety-eighth meridian, to be determined and designated by the board of education of the State normal school. Said school was located by said board September 1, 1903, at Kearney, Buffalo County, Nebr. Said school shall be in all respects under the direction and control of the board of education of the

State normal school located at Peru, Nemaha County, Nebr., and said school shall be for the same purpose and governed in all respects by the provisions of the statutes now in force regulating and governing the State normal school at Peru, Nemaha County, Nebr.

There shall be not less than three and not more than five junior normal schools at such time and places as are hereinafter designated. The terms and time of holding these junior normal schools shall be not less than ten weeks between the 1st day of June and the 1st day of September of each year; and three of these junior normal schools shall be established and maintained in the school districts of Alliance, McCook, and Valentine, and at not more than two other places, to be determined by the State superintendent: *Provided*, That at each of these places the public school buildings, text-books, and apparatus of the respective school districts be placed at the service of the State under the jurisdiction of the State superintendent. The organization and management of the junior normal schools shall be under the jurisdiction of the State superintendent, and he shall as far as practicable attend such junior normal schools, provide proper instructors for the same, and make and complete all other arrangements. The studies pursued at these junior normal schools shall be a part of the regularly prescribed course of the State normal school or schools, and students in regular attendance and pursuing and completing these studies in a satisfactory manner shall be granted a certificate to that effect, signed by the conductor of the junior normal school and countersigned by the State superintendent, which certificate shall entitle the holder to proper credit at the State normal school or schools.

3. SCHOOLS.

Length of term—Attendance—Truant schools—Text-books.

Length of term.—District school boards shall determine at each annual meeting the length of time a school shall be taught in the district the ensuing year, which shall not be less than three months by a legally qualified teacher in a district having less than 20 pupils of school age, nor less than six months in districts having between 20 and 75 pupils, inclusive, nor less than nine months in districts having more than 75 pupils. They may also determine and instruct the district officers as to the different length of the terms of school, and the seasons of the year in which the same shall be taught; and the district officers shall see that school is actually taught therein by a licensed teacher in conformity to such instructions and for not less than the length of time herein required. No district shall receive any portion of the State funds unless school shall have been actually taught therein for the length of time stated above, except in cases of epidemic disease, by reason of which the school board shall deem it advisable to close the school, or because of the destruction of the schoolhouse, or when it shall appear that the district has in good faith raised and expended the maximum tax allowed by law and the funds so raised have been insufficient to maintain a school for the time required.

Attendance.—Every person having charge or control of any child not less than 7 nor more than 15 years of age shall during each school year between the second Monday of July and the last Monday of June following cause such child to attend the public day schools for a period of not less than twelve weeks; and if the public day schools of the school district in which such person or persons having charge or control of such child may reside shall be in session more than twelve weeks during the school year between the second Monday of July and the last Monday of June following, then the person having control of such child shall cause him to attend such public day school not less than two-thirds of the entire time the said schools shall be in session. Such attendance shall begin with the first opening of the public day schools after the second Monday of July, and shall continue consecutively until the required period of attendance is completed: *Provided*, That the portion of this act requiring attendance in public day school shall not apply in any case where the child is, for a time equal to that required by this act, instructed in some private or parochial school; or where the child is instructed at home or elsewhere by a person qualified to give instruction in the studies required to be taught in the public schools; or where the child has completed the studies required for obtaining a certificate of graduation from the eighth grade of such schools; or where a youth, being of the age of 14 years, is of necessity regularly employed for his own support or the support of

those actually dependent upon him; or where the child is physically or mentally incapacitated for the work done in the schools; or where the child lives more than 2 miles from the school by the nearest traveled road, unless free transportation to and from such school is furnished. In case exemption is claimed on account of mental or physical incapacity, the school authorities shall have the right to employ a physician who shall have authority to examine such child, and if such physician shall declare that such child is capable of undertaking the work of the schools, then such child shall not be exempt from the requirements of this law. In case exemption is claimed and granted on account of youth of the age of 14 years being compelled to support themselves or those dependent upon them, such youth may be required to attend a public evening school or some other suitable school for not less than two hours each school day, during the time provided for school attendance.

All persons of from 7 to 18 years of age, residents of this State, who by reason of partial or total blindness or deafness are unable to obtain an education in the public schools, shall be required to attend the institute for the blind or the school for the deaf, unless said persons are being privately or otherwise educated, or unless (under the provisions of chapter 22, Compiled Statutes of Nebraska of 1901) they are not subjects for admission to the institutes for the deaf and dumb and blind.

In case exemption is claimed on account of attendance at a private or parochial school, or on account of attendance upon suitable instruction elsewhere given, the authorities of the private or parochial school so attended, or the person giving elsewhere such instruction, shall keep a record showing the names and ages of all children enrolled, the number of the school district, and the county of their residence, the number of days such child or children claiming exemption were members of such school or attendants upon such instruction, the days on which such pupils were present and absent, respectively; and the authorities of such private or parochial school, or the person giving elsewhere such instruction, as well as the authorities of all public schools, shall furnish at the end of each month a report to the county or city superintendent covering said items of record as above. And it is the duty of such county or city superintendent, upon the receipt of the report for the first month of school in said district and each two weeks thereafter, to compare such reports with the last census report on file in his office from such district, and prepare a list of all children or youth resident in such district who are not receiving instruction as required, and to transmit said list to the officer or officers in such district whose duty it is to enforce the provisions of this law.

District boards in other than city districts may appoint a truant officer, or else the director shall act as such truant officer. Boards of education in cities shall appoint one or more truant officers. All truant officers shall qualify as special constables or police officers; shall see that the requirements of law are duly enforced in the districts for which they severally act; shall have authority to apprehend and take to his home or to some public, private, or parochial school any child subject to and violating the law; shall receive for such services a compensation to be determined by the district board or board of education to be paid out of the general school funds of the district as are other ordinary expenses of maintaining the school; and on failure or neglect to discharge the duties herein prescribed shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than \$5 and not more than \$25. Any truant officer who has reason to believe that any person having control of a child subject to the provisions of this law is neglecting or failing to comply with the provisions thereof shall immediately investigate the case and give written notice to such person that the law must at once be complied with, and if within one week after giving such notice the said person shall not have complied the truant officer shall file complaint against him in some court having jurisdiction, and upon conviction thereof he shall be punished by a fine of not less than \$5 nor more than \$25.

The county superintendent in each county shall, without additional salary, act as head truant officer, and it shall be his duty as such head truant officer to see that each truant officer in the county discharges properly the duties of his office.

Truant schools.—Boards of education in cities may establish and conduct special schools for the instruction of children who can not profitably or properly be cared for in the usual schools. Any child of school age who is habitually truant or incorrigible, or whose conduct and habits are such that he can not with profit to himself or justice to the other members of the school be retained and

instructed in the usual schools, may, upon complaint of the person having legal or actual control of such child, or of the principal or head of the school where such child is attending, or of the truant officer, be required by the superintendent of the city schools to attend a special school until such time as the child's habits and conduct become such as to make it advisable and proper for him to be received again into the usual school. These special schools shall be taught in such localities as may be considered proper and suitable by the board of education. They shall give instruction in the branches required by law to be taught in the common schools. They shall be as good in conveniences, equipment, and condition of health as the usual schools of the city where they are situated, and they shall be taught by teachers specially fitted by nature and experience to control and instruct wisely and successfully the special class of children to be educated therein.

Text-books.—District school boards, boards of trustees of high school districts, and boards of education in cities shall purchase all text-books necessary for the schools of such district, and they are further authorized to enter into contract as hereinafter provided with the publishers of such books for not to exceed five years. Before any publisher shall be permitted to enter into contract with any school district he shall file with the State superintendent a good and sufficient bond in the sum of \$2,000 to \$20,000 for the faithful performance of the conditions of such contracts and the observance of the law; and such publisher shall also file with the State superintendent a sworn statement of the lowest prices for which his series of text-books are sold anywhere in the United States. For the purpose of paying for schoolbooks the school district officers may draw an order on the county or township treasurer for the amount of schoolbooks ordered. The county or township treasurer shall pay orders drawn by school district officers for the purchase of schoolbooks out of any funds in his hands belonging to the district, except the money received from that derived from the teachers' fund. Any contract entered into with any publisher who shall subsequently become a party to any combination or trust for the purpose of raising the price of school text-books shall, at the wish of the school board of the district using such books, become null and void.

The State superintendent shall, within thirty days after the filing of the herein-before-mentioned sworn statement of prices of text-books, have the same printed and forward a sufficient number of certified copies of the same to each of the county superintendents of the State to furnish all the school districts of such county with one copy of each; and the county superintendent shall, immediately after receiving said certified copies of prices of books, send or deliver one of such certified copies to the director or secretary of each school district or board of education in such county, to be filed as a part of the records of such district; and he shall also file one of said certified copies of prices in his office as a part of the records of said office. It shall be the duty of the State superintendent to prepare and have printed a form of contract between district boards and publishers of school books, and to furnish the same, through the county superintendent, to the several district boards of the State; and no other form of contract shall be used by such district boards and publishers.

All books purchased by district boards shall be held as the property of the district and loaned to pupils of the school while pursuing a course of study therein free of charge; but the district boards shall hold such pupils responsible for any damage, loss, or failure to return such books at the time and to the person that may be designated by the board of such district.

The provisions of this law include all school supplies. Any pupil or parent may purchase from the board such books as may be necessary, at cost to the district. The board may designate some local dealer to handle books for the district, with such an increase above contract price to pay cost of transportation and handling, as may be agreed upon between said board and said dealer.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The governor, secretary of state, treasurer, attorney-general, and commissioner of public lands and buildings shall, under the direction of the legislature, constitute a board of commissioners for the sale, leasing, and general management of all lands and funds set apart for educational purposes and for the investment of school funds in such manner as may be prescribed by law.

The following are perpetual funds for common school purposes, of which the annual interest or income only can be appropriated, to wit: (1) Such per cent as has been or may hereafter be granted by Congress on the sale of lands in this State; (2) all moneys arising from the sale or leasing of sections Nos. 16 and 36 in each township in this State, and the land selected or that may be selected in lieu thereof; (3) the proceeds of all lands that have been or may hereafter be granted to this State, where, by the terms and conditions of such grant, the same are not to be otherwise appropriated; (4) the net proceeds of lands and other property and effects that may come to the State by escheat or forfeiture, or from unclaimed dividends, or distributive shares of the estates of deceased persons; (5) all moneys, stocks, bonds, lands, and other property now belonging to the common school fund.

All other grants, gifts, and devises that have been or may hereafter be made to this State, and not otherwise appropriated by the terms of the grant, gift, or devise, the interest arising from all the funds mentioned in the preceding section, together with all the rents of the unsold school lands, and such other means as the legislature may provide, shall be exclusively applied to the support and maintenance of common schools in each school district in the State.

All fines, penalties, and license moneys arising under the general laws of the State shall belong and be paid over to the counties respectively where the same may be levied or imposed, and all fines, penalties, and license moneys arising under the rules, by-laws, or ordinances of cities, villages, towns, precincts, or other municipal subdivisions less than a county, shall belong and be paid over to the same respectively. All such fines, penalties, and license moneys shall be appropriated exclusively to the use and support of common schools in the respective subdivisions where the same may accrue.

Taxation.—For the purpose of affording the advantage of free education to all the youth of this State, the State common school fund, in addition to the funds derived from the sale of school lands and interest thereon, and fines and forfeitures, as provided by statutes and the constitution, shall be further increased by annual levy and assessment of not to exceed $1\frac{1}{2}$ mills upon the dollar valuation on the grand list of the taxable property of the State; and the amount so levied and assessed shall be collected in the same manner as other State taxes, and when collected shall be semiannually distributed to the several counties of this State in proportion to the enumeration of scholars, and be applied exclusively to the payment of teachers' wages.

The several county superintendents shall, within twenty days after receiving such apportionment, and after adding thereto all moneys received by the county treasurer on account of fines and licenses, apportion the entire amount as follows, to wit: One-fourth of the whole amount to be distributed equally to the several districts in the county, and the remaining three-fourths of the whole to be distributed to the several districts in his county pro rata according to the enumeration of scholars last returned by the directors of the various districts; and no district, city, or village which shall have failed to sustain a school for the length of time required by law shall be entitled to receive any portion of the fund.

(See Schools—Length of term.)

The legal voters of a rural or village school district and of a high school district shall determine the number of mills on the dollar of assessed valuation, which shall be levied for all purposes except for the payment of bonded indebtedness and purchase or lease of schoolhouse, which shall not exceed 25 mills in any year, and shall be levied by the county board and collected as other taxes are collected. The board of education of schools in cities shall annually, during the month of June, report to the county commissioners an estimate of the amount of funds required for the support of the schools during the fiscal year next ensuing, and thereupon the county commissioners are authorized and required to levy and collect the necessary amount the same as other taxes.

The board of education in metropolitan cities shall annually, during the month of January, estimate the amount of resources likely to be received for school purposes, including the amounts available from fines, licenses, and other sources; they shall report during the month of January to the city council the number of mills tax on the dollar deemed necessary to be levied upon all taxable property of the district during the fiscal year next ensuing for the support of the schools, purchase of school sites, erection and furnishing of school buildings, payment of interest upon all bonds issued for school purposes, and for the creation of a sinking fund for the payment of such indebtedness; and the city

council shall levy and collect the number of mills tax so demanded by the board of education in the same manner as other taxes are levied and collected, but in case the purchase of school sites and the erection of buildings shall require an expenditure exceeding \$25,000 for any one calendar year the question shall be submitted to a vote of the electors of the said district. The aggregate school tax shall in no one year exceed 2 per cent upon all the taxable property of the district.

NEVADA.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—County superintendent—County board of examination—District board.

State board.—The State board of education shall consist of the governor, who shall act as president, the president of the State university, and the State superintendent, who shall be secretary. The board shall meet at least twice a year and has the following duties: To prescribe and cause to be adopted a uniform series of text-books, regulate State and county examinations, prescribe the course of study in the public schools, recommend a list of books for district school libraries, determine appeals from decisions of county superintendents, and grant life diplomas, educational diplomas, and State certificates to the graduates of the Nevada State normal school and to the holders of life diplomas of other States or of any State normal school.

State superintendent.—There shall be elected every four years a State superintendent of public instruction, who shall be paid an annual salary of \$2,000. He shall apportion school money to the several counties, subject to the supervision of the State board; report to the governor biennially (of which report 250 copies shall be delivered to the State superintendent, who shall distribute the same among school officers of the State and the United States) a full statement of the condition of public instruction in the State, the condition and amount of all funds and property appropriated to the purpose of education, the number and grade of schools in each county, and number of children in each county between 6 and 18 years of age, the number of children of such ages attending public schools, number attending private schools, and the number attending no school, number under 6 years of age, number 18 to 21 years of age, amount of public school money apportioned to each county, amount raised by county taxation, district tax, rate bills, subscription, or otherwise, amount raised for building schoolhouses, plans for the management and improvement of public schools, and other information of educational importance. He shall prescribe and distribute the forms and books required by the service, compile the laws regarding schools and distribute copies thereof, visit the schools of each county in the State at least once in each year, and shall be allowed his traveling expenses, not to exceed \$1,000 a year.

County superintendent.—The district attorneys, in addition to their duties as such, shall be ex officio county superintendents. It shall be the duty of the county superintendent to apportion the public school moneys in the county treasury among the several school districts, to visit each school in his county within 10 miles of the county seat at least once each term (provided he shall visit all the schools in his county once each year), exercise a general supervision over the interests of the public schools, distribute promptly the blanks, etc., received from the State superintendent, file the reports made to him, and report annually an abstract of all the various annual reports of the city boards of education, school trustees, marshals, and teachers, conduct all county institutes, appoint school trustees where none have been elected to fill vacancies, and to draw warrants for the purchase of schoolbooks to be furnished to indigent children. Should the county superintendent fail to make a correct report to the State superintendent he shall forfeit \$200 from his salary. He may appoint a deputy, but the county shall not be responsible for the salary of the deputy. He or the deputy shall be present in his office during the business hours of each Saturday.

County board of examination.—(See Teachers—Appointment, qualifications, and duties.)

District board.—Each village, town, or incorporated city of this State shall

constitute but one school district, and the public schools therein shall be under the supervision and control of a board of trustees. The board of commissioners of the county may create new districts or change or abolish those already established when, in the judgment of the board, it is expedient. There shall be elected in each school district every two years two trustees, one to serve two and the other four years. The board of trustees shall have the care and custody of all school property, and if directed by the district shall sell any portion of it, or buy, build, or otherwise provide sites and buildings for school purposes. The board may repair buildings when the cost does not exceed \$500, and supply schoolhouses with necessary furniture, fixtures, and fuel. The board of trustees of each school district shall cause the school census marshal to annually enumerate the children between the ages of 6 and 18 years; shall also report the number of schools, specifying the grades, number and sex of teachers, number and sex of pupils, average attendance, length of term, compensation of teachers by sex, number and condition of schoolhouses and furniture and the estimated value thereof, number of books in public school libraries, the textbooks used in the schools, value and kind of school apparatus, the amount raised by rate bills, district taxation, and subscription for school purposes, amount expended in erecting and furnishing schoolhouses, and such other statistics as the State superintendent may require. The board shall employ teachers, provide books for indigent pupils, grade the schools if possible, suspend or expel pupils, apportion the school fund among the several schools in proportion to the average number of pupils attending each, establish a union school district, levy a tax when necessary to support schools for six months, call an election as to laying a tax to furnish additional school facilities, and assess rate bills after school has been maintained six months in the year.

2. TEACHERS.

Appointment, qualifications, and duties—Institutes.

Appointment, qualifications, and duties.—No teacher shall be paid from public school funds unless legally employed by the board of trustees, unless having had a certificate from the State board of education or the county board of examination in full force and effect, unless making a full report in manner and form prescribed by law, and taking oath to support the Constitution of the United States and the State and (in case of men) not to fight duels during the term of office.

State educational diplomas may be issued to such persons only as have held a State certificate or a first-grade county certificate for at least one year and shall furnish satisfactory evidence of having been successfully engaged in teaching for at least five years. Every application for an educational diploma must be accompanied by a certified copy of a resolution adopted by a board of trustees recommending the applicant as a successful teacher and as worthy of the diploma. Life diplomas may be issued by the State board upon all and the same conditions as educational diplomas, except that the applicant must furnish satisfactory evidence of having been successfully engaged in teaching for at least ten years. The State board may grant State certificates upon an appeal only after an examination held by a county superintendent.

The county superintendent shall appoint two competent persons, who, with himself, shall constitute the county board of examination. The board shall grant three grades of certificates: High school grade, for teaching a high school, good for four years; grammar school grade, for teaching unclassified and grammar schools, good for three years; primary grade, for teaching a primary school, good for two years. Certificates shall be issued only to those having passed a satisfactory examination in all the branches of study pursued in each specified grade of the public schools and having given evidence of good moral character and fitness to teach. The board of examiners may renew the certificate of a teacher acceptably teaching in the schools of the county.

Examinations for teachers' certificates shall be held semiannually and the questions shall be prepared by the State board, so as to be uniform throughout the State. The questions shall not be opened by the county superintendent until the day of examination.

Meetings.—The State superintendent, with the consent of the State board, shall have power to convene two State teachers' institutes annually in different sections of the State and shall preside over them. Teachers who attend one

shall not be required to attend the other. The sessions shall last from three to ten days. The purpose of the institute shall be to train and instruct teachers of the State so far as may be necessary in practical and scientific methods of work, to simplify and unify the courses of study in the public schools, etc. Class work in common school branches shall be a prominent feature of all institute programmes. All teachers shall be required to attend the institute held in the section where they are engaged, and without loss of salary. The State superintendent shall have power to engage lecturers and instructors.

The county superintendent shall have power to call one or more teachers' institutes annually, and the expenses to the sum of \$100 shall be paid out of the county general fund, provided they have been authorized by the board of commissioners.

3. SCHOOLS.

Attendance—Course of study—Text-books—Buildings.

Attendance.—Every parent or guardian or other person having control of a child between the ages of 8 and 14 years residing within 2 miles of a public school shall be required to send such child to a public school for a period of at least sixteen weeks in each school year, at least eight of which shall be consecutive, unless such child be excused from such attendance by the board of school trustees of the school district in which such parents or guardians reside, upon its being shown to their satisfaction that the bodily or mental condition of such child has been such as to prevent his attendance at school or application to study for the period required, or that such child is taught in a private school or at home in such branches as are usually taught in primary schools, or has already acquired the ordinary branches of learning taught in the public schools.

It shall be the duty of the board of school trustees of each school district in the State, on or before the first Monday in September of each year, to furnish the principal of each public school taught in such district with a list of all children resident in the school district between the ages of 8 and 14 years, said list to be taken from the report of the school census marshal. At the beginning of each school month thereafter it shall be the duty of the principal of each school in such district to report to the board of school trustees the names of all children attending school during the previous school month; when, if it shall appear, at the expiration of four school months, to the board of school trustees that any parent, guardian, or other person having control of any child shall have failed to comply with the provisions of this act, the board shall cause demand to be made upon such parent, guardian, or other person for the amount of the penalty hereinafter provided; when, if such parent, guardian, or other person shall neglect or refuse to pay the same within five days after the making of said demand, the board shall commence proceedings, in the name of the school district, for the recovery of the fine hereinafter provided, before any justice of the peace in the township in which said school district is located; or, if there shall be no justice of the peace therein, then before the nearest justice of the peace in the county. Any such parent, guardian, or other person failing to comply with the provisions of this act shall be liable to a fine of not less than \$50 nor more than \$100 for the first offense, nor less than \$100 nor more than \$200 for the second and each subsequent offense, besides the cost of collection. All fines collected under the provisions of this act shall be paid into the county treasury on account of the State school fund.

It shall be the duty of the county superintendent in each county to cause this law to be published in some newspaper in his county, if there be one, four consecutive times annually, for a period of two years, the expense of such publication to be allowed and paid out of the general school fund of the county. The board of school trustees in each school district shall cause to be posted annually, for a period of two years, in three public places in their district, notices of the requirements and penalties of this act.

Course of study.—There shall be taught in the public schools orthography, reading, writing, arithmetic, geography, English grammar, history of the United States, chemistry, and elementary physiology and hygiene, which shall give special prominence to the effects of alcoholic drinks, stimulants, and narcotics; and in such schools as the district trustees may direct, algebra, geometry, drawing, natural history and philosophy, astronomy, and the elements of bookkeeping.

Text-books.—The State board of education shall recommend to the legislature a series of text-books in reading, writing, spelling, arithmetic, grammar, geography, history of the United States, physiology, drawing, and language, to be adopted for use in all public schools in the State; and no school district shall be entitled to receive its pro rata of the public school money unless such text-books are used as shall have been adopted by an act of the legislature. No change shall be made in such series except by legislative act, and then not oftener than once in four years. For the schools in which the trustees may direct instruction to be given in additional branches, there shall also be prescribed by the State board text-books in algebra, geometry, physics, astronomy, physical geography, chemistry, Latin, rhetoric, literature, English history, general history, civics, geology, bookkeeping, and music.

Whenever it shall appear to the satisfaction of the board of trustees of any school district that parents, guardians, or other persons having control of any child in attendance upon the public school of said district are unable to procure suitable books, stationery, etc., for such child it shall be the duty of such board to procure for such child all necessary books, stationery, etc., the same to be paid for out of the fund of said school district in the same way that other claims against the school district are now allowed and paid. All books, stationery, etc., purchased under this provision shall be the property of the school district, under the care and control of the school trustees when not in actual use.

Buildings.—No public schoolhouse shall be erected unless its plan shall have been approved by the county superintendent. The care and control of school property shall be in the hands of the board of district trustees. It shall be a misdemeanor for any person to disturb the peace of any public school within the grounds or building of such school, or within a distance of 50 yards in all directions from the school building. It shall be a misdemeanor for any person to detain, beat, whip, or otherwise interfere with any pupil attending any public school on his way to or from school. Penalty in both the foregoing cases shall be a fine of not more than \$300, or imprisonment in the county jail for six months, or both.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The principal of all moneys accruing to this State from the sale of lands given or bequeathed for public school purposes, all fines collected under the penal laws of the State, 2 per cent of the gross proceeds from all toll roads and bridges, and all the estates that may escheat to the State shall be solemnly pledged for educational purposes, and shall not be transferred to any other fund for other uses, but shall constitute an irreducible and indivisible fund to be known as the State school fund, the interest accruing from which shall be divided semiannually among the counties in this State entitled by law to receive the same, in proportion to the number of persons 6 to 18 years of age, for the payment of qualified teachers; and no portion of the amount distributed shall, either directly or indirectly, be paid for the erection of schoolhouses, the use of schoolrooms, furniture, or any contingent expenses of public schools.

Taxation.—There shall be levied an ad valorem tax of one-half of 1 mill on the dollar of all taxable property in the State, to be known as the State school tax, which shall become a part of the State school fund. There shall be set apart semiannually 5 per cent out of all moneys received as State tax for school purposes, and such amount shall be distributed pro rata.

The board of county commissioners of each county shall annually levy a county school tax, not to exceed 50 nor less than 15 cents on each \$100 of taxable property, which shall be collected into the county treasury as a special deposit.

When the State and county money to which any district is entitled is not sufficient to keep a school open for six months in each year, the trustees of such district shall levy a tax upon the taxable property of the same sufficient to supplement the said State and county money so as to keep a school open for six months each year. And the board of trustees of any school district may submit to the electors the question of taxing themselves to raise funds for additional school facilities or to keep the schools open for a longer period.

NEW HAMPSHIRE.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—School districts—School board—Truant officers—Superintendent of schools.

State superintendent.—The governor, with advice of the council, appoints a superintendent of public instruction for a term of two years, who has general supervision and control of the educational interests of the State. It is his duty to prescribe the form of school register, and of blanks and inquiries for returns of school boards, sending same seasonably to clerks of towns and cities; preserve or distribute all State documents pertaining to education; arrange in his office reports and returns of school boards; investigate the condition of popular education in the State, especially in relation to temperance instruction; report biennially a concise abstract of returns of school boards, detailed statement of his own doings, condition and progress of popular education in the State, with recommendations in regard to improving same; lecture upon education in as many towns and cities as time will permit; arrange for at least one teachers' institute in each county per year, appointing some other suitable person to conduct the same where he can not do so; forward copy of his annual report to chairman of every school board in the State; arrange for examinations of candidates for teachers' certificates, at times and places designated and advertised by him, and issue probationary or permanent certificates to those found qualified (each certificate indicating the grade of school the holder is qualified to teach), which shall be accepted by school boards in lieu of personal examinations; keep a list of such approved candidates, and send copies of same, with other information, to school boards upon request. His annual report shall state the condition of the State normal school, terms of admission and graduation, and the times of beginning and closing sessions; which information he shall also cause to be printed on the cover of the school register.

School districts.—Each town constitutes a single district for school purposes, except certain districts organized under special acts of the legislature. Special districts may unite with town districts by vote of each. Two or more town or special districts may combine for establishing a high or other school or for employing a superintendent (see Superintendents). A district may admit scholars from other districts into its schools on terms determined by vote or by the school board; a district may contract with an academy or other literary institution within its immediate vicinity for furnishing instruction to its scholars, using the school money therefor.

School board.—Consists of three persons, except that where a high school is maintained the number may be increased to six^{or} nine; one-third chosen annually by town meeting (women may vote), to hold office three years; compensation determined by town or selectmen. Duties of the board are to provide schools at such places and times each year as will best subserve the interests of education and give to scholars as nearly equal advantages as practicable; visit and inspect each school at least twice each term; hire or dismiss teachers; furnish fuel; make occasional repairs to buildings and furniture, not to exceed 5 per cent of the school money; purchase text-books and other supplies at the expense of the town; prescribe regulations for school government which, when recorded by town clerk and read before school, shall be binding upon scholars and teachers; appoint truant officers and fix their compensation; prescribe in all mixed schools and graded schools above primary the study of physiology and hygiene with special reference to the effects of alcohol and narcotics (\$200 penalty for noncompliance), and to provide well-approved text-books on said subject; annually in June or July, and at such other times as they deem best, they shall examine applicants for teachers' certificates and issue certificates (good for one year) to those found qualified. By August 1 they shall report to selectmen (sending copy of said report, with answers to other inquiries, to State superintendent, under penalty of \$50 for noncompliance) stating the number of weeks of school during the year; number of teachers, male and female; number of scholars attending each school; number instructed in each study; number of days' attendance of all pupils; number of scholars 5 years old and over who have attended two weeks or more during the year; number of each sex reported by truant officers; number of each sex between 5 and 16 who have not attended school; number between 14 and 21 who can not read and write, together with such suggestions as they think useful. (See also Attendance.)

Truant officers.—School boards shall appoint truant officers (for one year), fix their compensation, and may remove them for cause. Truant officers shall, under direction of the board, enforce laws and regulations relative to compulsory attendance; also relative to employment of children, for which purpose they may visit and inspect manufacturing and other establishments. They have authority to take and place in school any child found truant or employed contrary to law. Annually, in April, truant officers must make an enumeration of children (each sex) between 5 and 16 in their town or city, giving such items in regard to each child as may be required by school board, to whom report shall be submitted within fifteen days after completion of enumeration.

Superintendents.—A school district may require the board to appoint a superintendent of schools, who shall hold office for such term, receive such compensation, and be vested with such of the powers and charged with such of the duties of the board as it may determine. Two or more towns or districts, employing not less than 20 nor more than 60 teachers, may unite to form a supervisory district for the purpose of employing a superintendent, who shall give his entire time to the work; their several boards constitute a joint committee, who prescribe superintendent's duties, fix his compensation, and apportion same among the several districts in proportion to service to be rendered each. Such districts formed outside of cities and employing as superintendent at an annual salary a person holding a permanent teacher's certificate, receive half the amount of such salary from the State.

2. TEACHERS.

Appointment and duties—Certificates—Institutes—Training.

Appointment and duties.—Teachers holding certificates are appointed by the school boards, who shall dismiss any teacher found by them incompetent or unsuitable, or who may not conform to regulations by them prescribed. Pay can not be recovered for service rendered after notice of dismissal. Twenty dollars of each teacher's wages shall be withheld until he returns the school register to the board at the end of the term, with all entries properly made as required by State superintendent.

Certificates.—Examinations are held annually by the school boards in June or July, and at such other times as the boards may deem best. They embrace the studies required by law (see Schools—Course of study) or prescribed by the school board in accordance with law, and involve professional as well as scholastic ability and good moral character. Candidates found competent receive certificates signed by the board, good for not more than one year. Certificates issued by State superintendent are received by the school boards in lieu of personal examination. (See also Organization—State superintendent.)

Institutes.—At least one teachers' institute in each county per year shall be held by the State superintendent; or, if he be unable to conduct it in person, he shall appoint the principal of the State normal school or some other suitable person for that purpose. The income from certain State lands constitutes a permanent teachers' institute fund, from which are paid all necessary expenses of such institutes, including cost of instruction and lectures (see also Schools, normal). Teachers may close their schools and attend such institutes held within the State for not exceeding three days in any term or five days in any year with pay.

Training.—(See Schools, normal.)

3. SCHOOLS.

Miscellaneous provisions—Attendance—Studies—Text-books—Buildings and grounds—High schools—Evening schools—Normal schools.

Miscellaneous provisions.—Three hours in the forenoon and three in the afternoon constitute a school day, five such days a school week, and four such weeks a school month. Every district shall maintain its schools at least twenty weeks every school year. Disturbance of a school by a person not a scholar (see also Attendance) is punishable by a fine of not more than \$50 or imprisonment not exceeding thirty days. One session or a part thereof in Memorial Day week shall be devoted to exercises of a patriotic nature.

Attendance.—Persons shall attend or send to school in the district wherein they reside, unless by consent of school board. No child shall attend any public

or private school who has not been vaccinated, unless he has had smallpox. A scholar may be dismissed by the school board for gross misconduct or neglect or refusal to conform to rules and shall not attend until restored by board. Scholars shall attend the schools to which they are assigned. If after notice a scholar shall attend or visit a school where he has no right, or shall interrupt or disturb the same, he shall be fined \$5 for first offense, \$10 for any subsequent offense, or be imprisoned not exceeding thirty days. Districts may make by-laws not repugnant to law concerning truants, with penalties not above \$10 for each offense, or committal to reform school not exceeding one year; but court may remit penalties upon proof that offender is unable to pay and has no parent or guardian able to pay. The offender may give \$25 bond, with sureties approved by court, that he will regularly attend school for one term and comply with regulations; whereupon the fine may be remitted on payment of costs. No child under 12 shall be employed in any manufacturing establishment; no one under 14 shall be engaged at any employment during the term of school in his district; nor any one under 16, without first presenting a statement of his age sworn to by parent or guardian before superintendent (or, if none, before some person so authorized by school board), who must also certify that such child can read at sight and write legibly simple English sentences. No minor who can not readily read and write simple English sentences shall be employed while a free public evening school is maintained in his district, unless he is a regular attendant at such school or a day school, or unless he presents a physician's certificate that his physical condition is such as would render such attendance, in addition to daily labor, prejudicial to his health. Parents or guardians permitting minors under their care to violate the foregoing shall forfeit not more than \$20 for the use of the evening school. An employer violating any of the foregoing provisions shall be fined not exceeding \$50 for each offense. Children between 8 and 14 shall attend public school during the session unless excused by school board because of physical or mental condition such as to prevent attendance or because of approved private instruction (in the English language) for a like term; noncompliance incurs fine of \$10 for first and \$20 for every subsequent offense. School boards failing to prosecute offenders under this chapter shall forfeit \$20 for each neglect. Boards may use not exceeding 25 per cent of the school money for conveying scholars to and from school.

Studies.—In public schools shall be taught reading, writing, English grammar, arithmetic, geography, and such other branches adapted to the advancement of the schools as may be prescribed by the local school board, which may include algebra, geometry, surveying, bookkeeping, philosophy, chemistry, and natural history. In all mixed schools and in all graded schools above primary must be taught physiology and hygiene, with special reference to the effects of alcoholic stimulants and narcotics; amount and character of such instruction is the subject of special investigation by State superintendent, who shall recommend to the school boards what he considers the best text-books on said subject and the best mode of teaching them; the boards must see that well-approved text-books are furnished teachers and scholars, and that the subject is thoroughly taught. Boards neglecting this duty are subject to a fine of \$200.

Text-books.—The school boards shall purchase text-books and other supplies required in public schools at the expense of the town, loan the same to pupils free of charge under such regulations for their care as the board may prescribe, and make provision for their sale at cost to pupils wishing to purchase. No book shall be introduced that is calculated to favor any particular religious sect or political party.

Buildings and grounds.—The location of schoolhouses is determined in town or rural districts (1) by vote; (2) by a committee appointed for the purpose, which shall not have power to bind the district beyond the amount of money voted; (3) if 10 or more voters are aggrieved by a location determined by "(1)" or "(2)," they may petition the school board, who shall hear both sides and determine the location; (4) if the district fails to agree upon a location or upon a committee, or if such committee fails to agree upon a location within thirty days, the school board, upon petition of 10 or more voters, shall determine the location; (5) if 10 or more voters are aggrieved by a location determined by "(1)," "(2)," "(3)," or "(4)," they may petition the county commissioners within ten days, who shall hear both sides and determine the location. The location, however made, shall be conclusive for five years. Upon similar petitions school boards or county commissioners may enlarge existing schoolhouse lots up to 1 acre in total area. If a district neglects to procure land selected for location or enlargement of a schoolhouse lot, or if the owner refuses to sell the

same at a reasonable price, the selectmen, upon petition of the school board or three or more voters, shall appraise the damages occasioned the landowner. In cities (except Concord and Keene) the school board has sole power to select schoolhouse lots and to purchase same with moneys specifically appropriated by the city council; no schoolhouse shall be erected or altered except upon plans approved by the school board; all new schoolhouses shall be constructed under direction of a joint special committee chosen in equal numbers by the city council and the school board. Upon the completion of a new schoolhouse the city council shall transfer it to the school board, and whenever a schoolhouse is no longer required for school purposes the board shall retransfer it to the council. Districts shall keep schools in their own houses if suitable; otherwise suitable accommodations shall be provided at the expense of the district. A district or school board may grant the use of any schoolhouse for a writing or singing school, or for religious or other meetings, whenever such will not conflict with regular school exercises. Shade trees presented to any town may be set out and protected at public expense in schoolhouse yards, highways, cemeteries, commons, and other public places as indicated by the donor.

High schools.—Any school district may, by vote or by law, establish and maintain a high school, in which the higher English branches and Latin, Greek, and modern languages may be taught. Two or more districts may maintain a high school jointly. Where a high school is not maintained, the town shall pay the tuition of scholars resident therein who attend a high school or academy elsewhere in the State; the parent or guardian shall notify his school board what high school or academy he has determined to patronize; if the town fails to pay such tuition, it is liable for the same to said parent or guardian, or the school attended, in an action for debt; a State appropriation of \$5,000 a year for payment of such tuition is distributed in the ratio of the several rates of taxation of the towns interested.

Evening schools.—Upon petition of 5 per cent of the voters of any town exceeding 5,000 population per last United States census, said town shall establish and maintain, in addition to other schools, evening schools for the instruction of persons over 14 in such branches of learning or art as the school board may determine. The board also may determine length of term, hours per evening, and make such regulations as to attendance as they deem expedient; but the establishment of evening schools shall not exempt anyone from the requirements of laws relating to compulsory attendance and the employment of children. (See Attendance.)

Normal schools.—The New Hampshire State normal school shall confine its instruction to normal school branches and be in session at least twenty weeks each year. Its management is vested in a board of seven trustees, composed of the governor, State superintendent, and five other persons appointed by the governor and confirmed by the council, who hold office two years. They meet once a year; receive no compensation beyond reasonable expenses; appoint a principal, who, with their advice and consent, selects assistants and provides for the discipline of the school. The trustees and principal arrange courses of study, prescribe and control examinations for admission and graduation, and grant certificates. Tuition and graduation are free to those who agree to teach in the public schools of the State for a period equal to the length of the course taken. The principal and teachers assist at teachers' institutes without additional compensation other than necessary expenses, so far as their normal duties will permit. On the cover of each school register must be printed the salient facts about the State normal school. (See State superintendent.)

4. FINANCES.

Taxation—Literary fund—Dog tax—State aid.

Taxation.—Towns or districts may raise money to maintain public schools; to build, purchase, rent, repair, or remove schoolhouses or outbuildings; to procure insurance; to provide suitable furniture, fuel, books, maps, charts, apparatus, and conveniences for schools; to plant and care for shade and ornamental trees upon schoolhouse lots; to convey scholars to and from school, and to pay debts. They may hire money for building schoolhouses, not exceeding four-fifths of the cost thereof, which shall be assessed as tax, collected and paid within five years with the interest.

Literary fund.—All taxes collected by the State upon banking, trust, building, loan, and other similar corporations resident outside the State, shall be

known as the "literary fund," and be distributed (in November) among the towns in proportion to the number of children not less than 5 years old who attended the public schools in such towns not less than two weeks during the year preceding. Such fund shall be applied to the maintenance of the schools during the current year. The school board may use one-fifth thereof in the purchase of blackboards, dictionaries, maps, charts, and school apparatus.

Dog tax.—Money accruing from the taxation of dogs, after payment of loss or damage to domestic animals occasioned by dogs, shall be applied to the support of the public schools.

State aid.—(See also Organization—Superintendents—Teachers—Institutes—Schools, high.)

NEW JERSEY.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State superintendent of public instruction—County superintendents—Boards of examiners—School districts.

State board of education.—The general supervision and control of public instruction shall be vested in a State board of education, which shall consist of two members from each Congressional district, who shall not be members of the same political party and who shall not reside in the same county, except where a Congressional district shall lie wholly within one county. Said members shall be appointed by the governor, by and with the advice and consent of the senate, each for the term of five years; and in the place of any member whose term shall expire a successor shall be appointed in like manner for the term of five years, so that there shall be always two members from each Congressional district.

The State board of education shall have the control and management of the State normal schools, the New Jersey School for the Deaf, the Farnum Preparatory School, and the Manual Training and Industrial School for Colored Youth.

[It shall have power]

To frame and modify by-laws for its own government; to elect its president and other officers, and to prescribe and enforce rules and regulations necessary to carry into effect the school laws of this State; to appoint county superintendents of schools and for cause to remove them; to prescribe rules and regulations for holding teachers' institutes; to decide appeals from the decisions of the State superintendent of public instruction; to make and enforce rules and regulations for the examination of teachers and the granting of certificates or licenses to teach.

The members of the State board of education shall receive no compensation for their services, but the State treasurer shall, upon the warrant of the State comptroller, pay their necessary expenses.

The State board of education shall report annually to the legislature in regard to all matters committed to its care.

State superintendent of public instruction.—The State superintendent of public instruction shall be appointed by the governor, by and with the advice and consent of the senate, for the term of five years and until his successor shall be appointed and confirmed. He shall receive a salary of \$5,000 a year, payable in equal monthly installments.

[He] may appoint an assistant State superintendent of public instruction and fix his salary, [who] shall perform all the duties of the State superintendent of public instruction during his absence. [He may also employ clerks.]

The State superintendent of public instruction shall be the secretary of the State board of education, and a member ex officio of all boards of examiners. He shall enforce all rules and regulations prescribed by the State board of education. He shall have supervision of all the schools of the State receiving any part of the State appropriation. He shall, from time to time, instruct county and city superintendents as to their duties and as to the best manner of conducting schools, constructing schoolhouses and furnishing the same.

[He] shall decide, subject to appeal to the State board of education and without cost to the parties, all controversies and disputes that shall arise under the school laws or under the rules and regulations of the State board of education.

[He shall fill vacancies in the office of county superintendent of schools, withhold his salary from any county superintendent who fails to perform his duty, authorize the withholding of school funds placed to the credit of any school district from such district for nonperformance of the school duties required by the rules and regulations of the State board of education, and shall also withhold teachers' salaries for nonperformance of duty. He shall apportion to the several counties the amounts of the school fund appropriated to them by the State.]

Reports of private schools.—The superintendent or manager of each educational institution receiving support or aid from the State, and the president, manager, or principal of each seminary, academy, or private school shall report to the State superintendent of public instruction annually, on or before the 1st day of August, such statistics relating to such institution, seminary, academy, or school, as said State superintendent of public instruction may require, and in the manner and form prescribed by him: *Provided*, That no report concerning the expenses or finances of such seminary, academy, or private school shall be required: *And provided further*, That no report of any seminary, academy, or private school shall be published or made public by the State superintendent of public instruction. [The State superintendent of public instruction is required to make an annual report.]

County superintendents.—The State board of education shall appoint for each county a suitable person to be the county superintendent of schools of that county, who shall hold office for the term of three years from the date of his appointment and until his successor shall have been appointed as aforesaid, unless sooner removed for cause by said board. No person shall be appointed as county superintendent of schools unless he shall hold a State teacher's certificate.

The yearly salary of a county superintendent of schools shall be a sum which shall be equal to \$8 for each teacher employed in the public schools in his county as ascertained from the last published report of the State superintendent of public instruction, but such salary shall in no case be less than \$1,300 nor more than \$2,000. [His actual expenses incurred in the performance of duty shall also be paid, provided they do not exceed \$350.]

A county superintendent of schools shall have power to administer, without charge, oaths or affirmations to teachers and school officers; to issue orders on the county collector in favor of the custodian of the school moneys of the several school districts in said county for that portion of the State school tax, the State appropriation, and the interest of the surplus revenue to which each of said school districts shall be entitled; to exercise general supervision over the public schools of the county under his charge in accordance with the rules and regulations prescribed from time to time by the State board of education; to visit and examine all the schools under his care; to inquire into the management, methods of instruction, and discipline in such schools; to note the condition of the schoolhouses, sites, buildings, and appurtenances; to examine the courses of study, text-books, and school libraries; to advise with and counsel boards of education in relation to their duties, particularly in respect to the construction, heating, ventilating, and lighting of schoolhouses, and to recommend to boards of education and teachers proper studies, methods, discipline, and management for the schools; to appoint members of the board of education for a new township, incorporated town or borough school district, and for any school district under his supervision which shall fail to elect members at the regular time. Such appointees shall serve only until the next election in the district for members of the board of education.

Each county superintendent of schools shall [make an annual report, as shall also] the superintendents, district clerks, and the custodians of school moneys of the several school districts. Whenever a superintendent of schools shall be appointed in any city school district, the supervision of the schools of such district shall devolve upon such superintendent and not upon the county superintendent of schools.

Board of examiners, State examiners.—There shall be a State board of examiners, consisting of the State superintendent of public instruction, the principals of the State normal schools, and one person to be appointed by the State board of education, [who] shall hold office for one year from date of his appointment as aforesaid. This member shall hold a first-grade State certificate, or shall be a graduate of a college or university. He shall receive for his services, in addition to traveling expenses, such compensation as may be fixed by the State board of education, not to exceed \$10 for each meeting of said board of examiners. Said board shall hold examinations of teachers, grant State certificates

to teach, and revoke the same under rules and regulations prescribed by the State board of education.

County examiners.—There may be in each county a county board of examiners consisting of the county superintendent of schools, who shall be its chairman, and a number of teachers not to exceed three to be appointed by him, who shall hold office for one year from the date of their respective appointments. No person shall be appointed as a county examiner unless he or she shall hold either a State or a first-grade county certificate. Said county board of examiners shall conduct examinations and grant certificates to teach at such times and under such rules and regulations as the State board of education may prescribe. It shall meet at such places as may be designated by the chairman. Each member of said board of examiners, except the county superintendent of schools, shall receive for his or her services, in addition to traveling expenses, such compensation as may be fixed by the State board of education not to exceed \$10 for each regular examination.

City examiners.—[In each city school district there may be a board of examiners, consisting of the superintendent of schools of such district, if there be one, and such persons as the board of education of the school district shall appoint. No person can be appointed an examiner without a proper certificate. The board shall grant certificates which shall be valid in the district.]

School district.—Each township, city, incorporated town, and borough shall be a separate school district, but each incorporated village shall remain and be a part of the school district in which said incorporated village shall be situate at the time of its incorporation. The State appropriation and the State school tax shall not be apportioned in any year to any district which shall not have maintained a public school for at least nine months during the preceding school year: *Provided*, That the State superintendent of public instruction may, for good cause shown, remit said penalty.

City school districts, appointive board.—In each city the mayor or other chief executive officer of such city shall, during the month of December next after the acceptance of the provisions of this section, as is hereinafter provided [i. e., by referendum], appoint nine persons to be members of the board of education of such city school district, who shall severally possess the qualifications for said membership prescribed in this article, [viz, he must have been a citizen and resident of the school district for three years before becoming a member of the board, and must be able to read and write. He shall not be interested in any claim against or contract with the board]. Three of such persons shall be appointed to serve for one year, three for two years, and three for three years, and annually thereafter, during the month of December, the said mayor or other chief executive officer of such city shall appoint three members of said board of education to serve for the term of three years, to take the place of those members whose terms shall expire with such year.

Elective board.—In each city there shall be elected at the first municipal election held in such city next after the acceptance of the provisions of this section, as is hereinafter provided [i. e., by referendum], nine persons to be members of the board of education of such city school district, who shall severally possess the qualifications for said membership [described above]. Three of such persons shall be elected to serve for one year, three for two years, and three for three years, and thereafter, at the regular municipal election in such city in each year, there shall be elected three members of said board of education to serve for the term of three years, to take the place of those members whose terms shall expire with such year.

Referendum.—The acceptance of the [foregoing] provisions shall be submitted to the qualified voters of any city at a general or municipal election to be held therein. [After the acceptance has been once submitted, the question shall not be submitted again for five years.] Said board of education or other body shall be hereafter deemed to be incorporated under the provisions of this act and shall have all the powers and be charged with all the duties conferred or imposed upon a board of education, as provided in this article. Such board shall, in and by its corporate name, sue and be sued, purchase, lease, receive, hold, and sell property, real and personal, take and condemn land and other property for school purposes in the manner provided by law regulating the ascertainment and payment of compensation for property condemned or taken for public use. [It] shall succeed to and be vested with all the property of every kind and all the rights and privileges, not inconsistent with the provisions of this act, theretofore vested in or possessed by any board of education, school commissioners, or other body theretofore having charge and control of the public schools or public

school property of the school district or of the city in which said district shall be situate.

Every such board shall have the supervision, control, and management of the public schools and public school property in its district, and shall keep such property insured. It shall appoint a person to be its secretary, and may appoint a superintendent of schools, a business manager and other officers, agents, and employees as may be needed, and may fix their compensation and terms of employment, but no such appointee, officer, agent, or employee other than the secretary shall be a member of said board. [The board shall make an annual report of the condition of the schools under its charge, of the property under its control, and a statement of the finances.]

Township, incorporated town and borough school districts.—In each township, incorporated town and borough school district, there shall be a board of education consisting of 9 members, [except that the number may be reduced to 3 when deemed best], 3 members of such board shall be chosen by ballot at the polls at each annual school meeting and shall hold office for the term of three years. In case there shall be a vacancy in a board of education, such vacancy shall be filled at the next annual meeting after such vacancy occurs, and the person elected to fill such vacancy shall be elected for the unexpired term only.

The board of education shall have power to employ and dismiss principals, teachers, janitors, mechanics, and laborers, and to fix, alter, and order paid their salaries and compensation; to make, amend, and repeal rules, regulations, and by-laws for its own government, for the transaction of business, and for the government and management of the public schools and the public school property in said district, and also for the employment and discharge of principals and teachers; to purchase, sell, and improve school grounds; to erect, lease, enlarge, improve, insure, repair, or furnish school buildings and to borrow money therefor with or without mortgage: *Provided*, That for any such act it shall have the previous authority of a vote of the legal voters of the district; to take and condemn land and other property for school purposes in the manner provided by law regulating the ascertainment and payment of compensation for property condemned and taken for public use; to enforce the rules and regulations prescribed by the State board of education, select the text-books, and, in connection with the county superintendent of schools, to prescribe the course of study to be pursued in the school or schools under its charge; to suspend or expel pupils from school; to provide text-books and other necessary school supplies; to call a special meeting of the legal voters of the district at any time when, in its judgment, the interests of the school require it, or whenever 50 of such legal voters shall request it by petition so to do.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment.—A board of education may make rules and regulations governing the engagement and employment of teachers and principals, the terms and tenure of such employment, and the promotion and dismissal of such teachers and principals, the salaries, and the time and mode of payment thereof, and may from time to time change, amend, or repeal such rules and regulations. The employment of any teacher by such board, and the rights and duties of such teacher with respect to such employment, shall be dependent upon and shall be governed by the rules and regulations in force with reference thereto. If a board of education shall not have made rules and regulations as aforesaid, then no contract between such board of education and a teacher shall be valid unless the same be in writing, or partly written and partly printed, in triplicate, signed by the president and district clerk or secretary of the board of education and by the teacher. One copy thereof shall be filed with the board of education, one copy with the teacher, and one copy with the county or city superintendent. Such contract shall specify the date when such teacher shall begin teaching, the kind and grade of certificate held by said teacher and the date when said certificate will expire, the salary, and such other matter as may be necessary to a full and complete understanding of the same. In every such contract, unless otherwise specified, a month shall be construed and taken to be twenty school days, or four weeks of five school days each. The salary specified in every such contract

shall be paid in equal monthly installments, not later than five days after the close of each month while the school shall be in session. Teachers employed in any graded school supported in whole or in part by State moneys shall receive salaries proportioned to their experience and success in the school district where they may be employed, the minimum salary ranging from \$408 per annum for assistant teachers in primary and grammar schools and kindergartens, with less than two years' experience, to a minimum of \$3,000 per annum for principals of high schools, with five years' experience and upward. Any contract or engagement between a board of education and a teacher shall cease and determine and be of no effect against said board whenever said board shall ascertain by notice in writing received from the county or city superintendent or otherwise, that said teacher is not in possession of a proper teacher's certificate in full force and effect, notwithstanding the term or engagement for which such contract shall have been made may not then have expired.

Duties.—Every teacher in a public school shall keep a school register in the manner provided therefor, and no salary shall be paid to such teacher until the district clerk or other officer or person authorized to deliver the check, order, or warrant for such salary shall ascertain that such register has been properly kept for the time for which salary is demanded, and shall enter upon said register a certificate to that effect. A teacher shall hold every pupil accountable in school for disorderly conduct on the way to or from school, or on the playgrounds of the school, or during recess, and shall suspend from school any pupil for good cause. No principal, teacher, or other person employed or engaged in any capacity in any school or educational institution, whether public or private, shall inflict or cause to be inflicted corporal punishment upon any pupil attending such school or institution.

No religious service or exercise, except the reading of the Bible and the repeating of the Lord's Prayer, shall be held in any school receiving any portion of the moneys appropriated for the support of public schools.

No teacher shall be required to serve on any jury in this State while his school shall be in session.

Preliminary training.—State normal schools shall be maintained for the purpose of training and educating persons in the science of education and art of teaching. The name and title of each such school shall be designated by the State board of education. Tuition in said schools shall be free.

The State board of education shall have the control and care of the buildings and grounds owned and used by the State for normal schools and of the funds for the support thereof; shall appoint and remove principals, teachers, and other employees, and shall fix their salaries; shall purchase and furnish text-books, apparatus, and supplies for the use of the pupils; shall prescribe courses of study for such schools; shall make rules for their management, and shall grant diplomas.

Each county shall be entitled to at least six times as many pupils in such schools as it shall have representatives in the legislature. In case any county shall not have the full number of pupils to which it shall be entitled, pupils may be admitted from other counties. Pupils when admitted shall sign a declaration that they intend to teach in the public schools of this State for at least two years immediately after being graduated unless excused temporarily by the State board of education, and that if they do not so teach they will refund to the State the cost of their education.

The State board of education may maintain model schools under regular teachers, in which pupils of the normal schools shall have the opportunity to observe and practice approved methods of instruction and discipline.

Teachers' institutes.—The State superintendent of public instruction shall procure instructors and lecturers for teachers' institutes. To defray the expenses incurred in holding said institutes there shall be paid to him annually by the State treasurer, upon the warrant of the State comptroller, a sum not exceeding \$4,000. Said State superintendent of public instruction shall make annually to the State board of education an itemized report of the expenses incurred in holding said teachers' institutes during the year for which said report shall be made. [An institute is prepared for each county; joint institutes are to be held when practicable. All teachers are required to attend the annual institute of their respective counties. (Rules and regulations of the State board of education.)]

3. SCHOOLS.

Attendance—Text-books—Buildings.

Compulsory education.—Every parent, guardian, or other person having the legal control of a child between the ages of 7 and 14 years shall, unless such child is being taught at home in the branches usually taught in public schools to children of his or her age, send such child to a day school each day while such school shall be in session, unless it shall be shown to the satisfaction of the board of education of the school district in which such parent, guardian, or other person shall reside that the bodily or mental condition of such child is such as to prevent his or her attendance at school.

Any parent, guardian, or other person having the legal control of any child who shall fail to comply with the provisions of this act shall be deemed to be a disorderly person, and upon sworn complaint made by the truant officer or other person designated to any justice of the peace, police justice, or city or town recorder acting as such within the municipality wherein such school district shall be situate shall be apprehended upon warrant issued to any constable of the county, and upon conviction shall be punishable as a disorderly person.

Truant officer.—The board of education of each school district may appoint, and may remove at pleasure, one or more persons to be designated as truant officers, and may fix their compensation, prescribe their duties, not inconsistent with the provisions of this article, and shall make rules and regulations for the performance of such duties.

The police authorities in any municipality having an organized police force shall, upon the written request of the board of education of the school district situate in such municipality, detail one or more members of said police force to act as truant officers.

Truant disorderly person.—Every child between the ages of 7 and 14 years who shall be repeatedly absent from school, or found away from home during school hours, or whose parent, guardian, or other person having legal control of such child, is unable to cause him to attend school, or who shall be habitually a truant from school, or who shall habitually wander about the streets and public places of any municipality during school hours having no lawful business or occupation, or any pupil who shall be incorrigible, actually vagrant, vicious, or immoral in conduct shall be deemed and adjudged to be a disorderly person and proceeded against as [such].

Every truant officer or other person designated by a board of education, who shall find any child between 7 and 14 years of age away from home during school hours, who shall then be a truant from school, shall take such child and deliver him to his parent, guardian, or other person having legal control of such child, or to the teacher of the school which said child is lawfully required to attend. [The truant officer shall examine into cases of truancy, when requested to do so by the inspector of factories and workshops or the district board of education, and warn the pupil, or the parent or guardian, in writing, and request that the truant attend school within five days therefrom. In case of noncompliance the parent, etc., is to be regarded as a disorderly person.]

Parental school.—The board of education of any school district may establish and maintain a school or schools, or may set apart separate rooms in a public school building for the use, restraint, and instruction of children between the ages of 7 and 14 years who shall be habitual truants from school, or who shall be habitually insubordinate or incorrigible and disorderly during their attendance at school. Such school or room shall be known as a parental school.

Said board of education may compel any such child to attend such parental school and, with the consent, in writing, of the parent, guardian, or other person having legal control of such child, may cause such child to be restrained and instructed therein for such a period and under such rules and regulations as said board of education may prescribe.

Free schools.—Public schools shall be free to all persons over 5 and under 20 years of age who shall be residents of the school district. Nonresidents of a school district, if otherwise competent, may be admitted to the schools of said district with the consent of the board of education, upon such terms as said board may prescribe: *Provided*, That the authority to charge tuition for non-resident pupils conferred by this section shall not apply to nonresident pupils transferred to any district by an order of the county superintendent of schools.

Whenever in any district there shall be children living remote from the schoolhouse, the board of education of such district may make rules and contracts for the transportation of such children to and from school.

Any child living remote from any public school in the district in which he or she shall reside shall be allowed to attend a public school in an adjoining district, with the consent of the county superintendent of schools.

No child between the ages of 4 and 20 years shall be excluded from any public school on account of his or her religion, nationality, or color.

Text-books.—Text-books and school supplies shall be furnished free of cost for use by all pupils in the public schools. Every school district shall raise and appropriate annually in the same manner as other school moneys shall be raised and appropriated in such district an amount sufficient to pay for such text-books and supplies. Every board of education shall make rules for the safe-keeping and proper care of text-books, and shall keep an account of all moneys expended by it for such text-books and supplies, and shall report the same in its annual financial statement. It shall be unlawful for any county superintendent of schools, member of a board of education, teacher, or any person officially connected with the public schools to be agent for or to be in any way pecuniarily or beneficially interested in the sale of any text-books, maps, charts, school apparatus, or supplies of any kind, or to receive compensation or reward of any kind for any such sale or for unlawfully promoting or favoring the same. A violation of the provisions of this section shall be punishable by removal from office or by revocation of certificate to teach.

Buildings.—Each school district shall provide suitable school facilities and accommodations for all children residing in the district and desiring to attend the public schools therein.

[Each schoolhouse is to have two suitable and convenient outhouses or water-closets, entirely separate from each other and having separate means of access, with a substantial closed fence between the buildings when detached from the schoolhouse. Noncompliance punished by withholding school funds.]

The State superintendent of public instruction shall procure architects' plans and specifications for school buildings and full detail working plans therefor. In the preparation of such plans due regard shall be given to proper heating, lighting, ventilating, and other hygienic requirements. Said plans and specifications shall be approved by the State board of education and shall be loaned to any district desiring to erect a new school building.

In any schoolhouse of two or more stories in height the doors leading from the class rooms to the corridors and from said corridors to the street or to the ground surrounding such schoolhouse shall open outwardly. All swing doors shall have plate glass windows of suitable dimensions.

In order that the health, sight, and comfort of the pupils may be properly protected, all schoolhouses hereafter erected shall comply with the following conditions: Light shall be admitted from the left or from the left and rear of class rooms, and the total light area must, unless strengthened by the use of reflecting lenses, equal at least 20 per cent of floor space. Schoolhouses shall have in each class room at least 18 square feet of floor space and not less than 200 cubic feet of air space per pupil. All school buildings shall have an approved system of ventilation, by means of which each class room shall be supplied with fresh air at the rate of not less than 30 cubic feet per minute for each pupil. All ceilings shall be at least 12 feet in height. All stairs, except cellar stairs, shall be not less than 4 feet in width and shall have intermediate landings. The several flights of stairs shall be inclosed by brick walls or by partitions of slow-burning construction and without open well holes. The risers of stairs shall not exceed $7\frac{1}{2}$ inches in height, and the treads shall be at least 10 inches in width, exclusive of the projecting nosings. Every schoolhouse having eight rooms shall have two flights of stairs of not less than 4 feet in width, or, in lieu thereof, one flight of stairs situated near the center of the building, not less than 6 feet in width. Every school building having more than eight and less than sixteen rooms shall have two flights of stairs not less than 5 feet in width. Every schoolhouse having sixteen or more rooms shall have three flights of stairs not less than 4 feet in width, or, in lieu thereof, two complete flights of stairs not less than 6 feet in width. Every building more than one story in height shall have metal ceilings, wooden ceilings painted white, or some light tint or plastered ceilings on metal lath.

4. FINANCES.

Funds (permanent and special)—Taxation.

School fund.—The governor, the attorney-general, the secretary of state, the State comptroller, and the State treasurer are hereby constituted a board of trustees of the fund for the support of public schools arising from appropriations heretofore made or which may be hereafter made by law, or which may arise from gift, grant, bequest, or devise, which board shall be known as "the trustees for the support of public schools."

All lands belonging to this State now or formerly lying under water are appropriated for the support of public schools, and all moneys hereafter received from the sales of such lands shall be paid to "the trustees for the support of public schools," and shall be invested by said board, and shall constitute a part of the permanent school fund of the State.

All leases which have been heretofore made, or which shall be hereafter made, of such lands shall be held by "the trustees for the support of public schools," as a part of the principal of the school fund, and the income arising from said leases shall be a part of the income of said school fund.

Moneys belonging to the school fund shall be invested by said board in the bonds of the several school districts of this State, or in the bonds of the United States, or of this State, or in the bonds of any county, city, incorporated town, township, or borough of this State, the total indebtedness of which shall not exceed in the aggregate 15 per cent of the total assessable valuation of all taxable property therein, and the interest thereof shall be a part of the income of said school fund. The income of said school fund shall be used for the support of public schools, the payment of the salaries of the county superintendents of schools, the payment of premiums and accrued interest on bonds purchased by "the trustees for the support of the public schools," and for no other use or purpose whatsoever. An account of the management of said fund shall be laid before the legislature with the annual statements of the State treasurer's accounts. No compensation shall be paid to said trustees or treasurer for any services performed in pursuance of this article.

There shall be annually apportioned and paid from the income of the school fund for the support of public schools \$200,000. If the income of said fund shall have not been received in full, or shall be insufficient for such appropriation, the sum necessary to make up the deficiency shall be drawn from the State treasury on the warrant of the State comptroller, which sum so drawn as aforesaid shall be replaced from the income of said school fund as soon as the same shall have been received.

The State superintendent of public instruction shall equitably apportion to the several counties the amount appropriated for the support of public schools from the State school fund on the basis of the aggregate number of days' attendance of all pupils attending the public schools during the year preceding that for which said apportionment shall be made, and shall furnish to the State comptroller and to the several county superintendents of schools and county collectors an abstract of such apportionment, and of the apportionment of the moneys due to the several counties from the State school tax and from the reserve fund, and shall draw his orders on the State comptroller and in favor of the county collector of each county for the amount to which such county shall be entitled.

Taxation.—For the purpose of maintaining free public schools there shall be appropriated each year from any moneys in the State treasury not otherwise appropriated such sum, not less than \$100,000, as may be determined by the legislature in the annual appropriation act; which sum shall be apportioned among and paid to the several counties in the proportion that the ratables of each of said counties shall bear to the total ratables of the State as exhibited by the latest abstract of ratables filed in the office of the State comptroller. In addition to the amount so determined and appropriated, a State school tax shall be annually assessed, levied, and collected upon the taxable real and personal property in the State, as exhibited by the latest abstract of ratables from the several counties made out by the several boards of assessors and filed in the office of the State comptroller. Said tax shall be such an amount as will make, when added to the amount determined and appropriated as aforesaid, a sum equal to $2\frac{1}{4}$ mills on each dollar of valuation of the taxable real and personal property in the State as exhibited by the last abstract of ratables from the several counties made out

by the several boards of assessors and filed in the office of the State comptroller, which tax shall be assessed, levied, and collected at the same time and in the same manner as other taxes shall be assessed, levied, and collected. The State comptroller shall apportion said tax and appropriation among the several counties in proportion to the amount of taxable real and personal estate of said counties, respectively.

The legal voters of each township, incorporated town, or borough school district may, at any annual or special meeting of said legal voters, by the vote of a majority of those present, raise by special district tax such sum or sums as a majority of said legal voters present at such meeting may agree upon for any or all of the following purposes: To enable the board of education to purchase or take and condemn land for school purposes; to build, enlarge, repair, or furnish a schoolhouse, or to pay a debt incurred therefor; for industrial schools, for manual training, and for the current expenses of the schools, in which term shall be included principals', teachers', janitors', and medical inspectors' salaries, fuel, text-books, school supplies, flags, transportation of pupils, tuition of pupils attending schools in other districts with the consent of the board of education, school libraries, compensation of the district clerk, of the custodian of the school moneys, and of truant officers; truant schools, insurance, and the incidental expenses of the schools.

NEW YORK.

[Mr. Edwin M. Holbrook, counsel to the department of education of New York, informs the Bureau that the present digest of the school law of that State will need another revision very soon. He says: "It is probable that the legislature of 1905 will adopt a revision of all laws relating to schools, and also of the university law."]

1. ORGANIZATION OF THE SYSTEM.

Commissioner of education—School commissioners—District trustees and board of education—Superintendent—Attendance (truant) officers.

The office of superintendent of public instruction and the office of secretary of the board of regents shall be abolished from and after April 1, 1904, and the powers and duties of said offices shall be exercised and performed by the commissioner of education. All the powers and duties of the board of regents in relation to the supervision of elementary and secondary schools, including all schools except colleges and technical and professional schools are hereby devolved upon the commissioner of education. The said commissioner of education shall also act as the executive officer of the board of regents. He shall have power to create such departments as in his judgment shall be necessary. He shall also have power to appoint deputies and heads of such departments, subject to the approval of the State board of regents.

Within ten days after the passage of this act the legislature shall elect a commissioner of education in the same manner as members of the board of regents are now elected, who either may or may not be a resident of the State of New York. The commissioner shall receive an annual salary of \$7,500, payable monthly, and shall also be paid \$1,500 in lieu of and in full for his traveling and other expenses, also payable monthly. The commissioner of education first elected shall serve for the term of six years, unless sooner removed for cause by the board of regents, and the legislature shall fill any vacancy that may occur during such period of six years for the balance of the term, and all successors in office after such term of six years shall serve during the pleasure of the board of regents, and all vacancies in the office of commissioner of education after such six years shall be filled by appointment by the board of regents.

On and after the 1st day of April, 1904, the corporation designated by the constitution as "the University of the State of New York" shall be governed and its corporate powers exercised by eleven regents. There shall be no "ex officio" members of the board of regents.

Within ten days after the passage of this act the legislature shall proceed to the election of eleven regents of the University of the State of New York in the manner now prescribed by the law for the election of a regent. Such regents shall be elected for the term of one, two, three, four, five, six, seven, eight, nine, ten, and eleven years, respectively, from the 1st day of April, 1904, and, so far as may be, one shall be chosen from each judicial district.

The commissioner shall be ex officio a trustee of Cornell University and of the New York State Asylum for Idiots, and a regent of the University of the State of New York. He shall also have general supervision over the State normal schools; and he shall provide for the education of the Indian children of the State, as required by this act. Beginning October, 1895, he shall, in cities of 10,000 or more, biennially have taken a census of persons 4-16, of illiterates 12-21, and of nonattendants at public schools because attending private schools or forced to work.

So often as he can, he shall visit such of the common schools of the State as he shall see fit and inquire into their course of instruction, management, and discipline, and advise and encourage the pupils, teachers, and officers thereof. He may appoint persons to perform this duty without remuneration.

He shall annually submit to the legislature a report containing a statement of the condition of the common schools of the State and of all other schools and institutions under his supervision and subject to his visitation as commissioner, estimates and accounts of expenditures of the school moneys, and a statement of the apportionment of school moneys made by him, all such matters relating to his office, and all such plans and suggestions for the improvement of the schools and the advancement of public instruction as he may deem expedient.

He may grant on examination a certificate of qualification to teach, and may revoke the same. While unrevoked, such certificate shall be conclusive evidence that the person to whom it was granted is qualified by moral character, learning, and ability to teach any common school in the State, and shall be considered a legal license to teach without further examination. He may issue a certificate, without examination, to any graduate of a college or university who has had three years' experience as a teacher, and may revoke the same for cause; he may indorse a diploma issued by a State normal school or a certificate issued by a State superintendent or State board of education in any other State, which indorsement shall confer upon the holder thereof the same privileges conferred by law upon the holders of diplomas or certificates issued by State normal schools or by the State superintendent in this State; and he may issue temporary licenses to teach, limited to any school commissioner district or school district, for a period not exceeding six months. Upon cause shown, he may annul any certificate of qualification granted to a teacher by a school commissioner or diploma issued by a State normal school, and he may reconsider and reverse his action in any such matter. He shall prepare and keep in his office alphabetical lists of all persons who have received, or shall receive, certificates of qualification from himself, or diplomas of the State normal schools, with the dates thereof, and shall note any action regarding certificates or diplomas held by them thereon. He may remove a school commissioner or withhold any State money from a district for violation or neglect of duty. He shall prepare suitable registers, blanks, forms, instructions, etc., and transmit them to the persons for whom they are intended.

School commissioner.—A school commissioner for each school district shall be elected by the electors of the school commissioner districts every three years, a resident of the county of either sex being eligible. In case of vacancy, the office is filled by the county judge or, if there be no judge, by the commissioner of education. His salary shall be \$1,000, payable from the free school fund, but the board of supervisors of the county may increase his salary by a majority vote, the increase to be raised by local taxation. He shall be allowed \$200 for his expenses, to be also raised by taxation. He is removable by the State superintendent. His duties are:

1. To ascertain whether the boundaries of the school districts within his district are definitely and plainly described in the records of the proper town clerks, and when found defective, indefinite, or disputed, to cause the same to be amended at the expense of the district or districts affected.

2. To examine all the schools and school districts within his district as often in each year as shall be practicable; to inquire into all matters relating to the management, the course of study and mode of instruction, and the text-books and discipline of such schools, and the condition of the schoolhouses, sites, out-buildings and appendages, and of the district generally; to examine the district libraries; to advise with and counsel the trustees and other officers of the district in relation to their duties, and particularly in respect to the construction, warming, and ventilation of schoolhouses and the improving and adorning of the school grounds connected therewith, and to recommend to the trustees and teachers the proper studies, discipline, and management of the schools and the course of instruction to be pursued.

3. Upon such examination, to direct the trustees to make any alteration or repairs on the schoolhouse or outbuildings necessary for the health or comfort of the pupils, not to exceed the sum of \$200, unless an additional sum shall be voted by the district. He may also direct the trustee to make any alterations or repairs to school furniture when it is unfit for use or to be repaired and to provide sufficient furniture, not to exceed the sum of \$100. He may also direct the trustees to abate any nuisance in or upon the premises, provided the same can be done at an expense not exceeding \$25.

4. By an order under his hand, reciting the reason or reasons, to condemn a schoolhouse if he deems it wholly unfit for use and not worth repairing, and to deliver the order to the trustees, or one of them, and transmit a copy to the superintendent of public instruction. Such order, if no time for its taking effect be stated in it, shall take effect immediately. He shall also state what sum, not exceeding \$800, will, in his opinion, be necessary to erect a schoolhouse capable of accommodating the children of the district. Immediately upon the receipt of said order the trustee or trustees of such district shall call a special meeting of the inhabitants of said district for the purpose of considering the question of building a schoolhouse therein. Such meeting shall have power to determine the size of said schoolhouse, the material to be used in its erection, and to vote a tax to build the same; but such meeting shall have no power to reduce the estimate made by the commissioner aforesaid by more than 25 per cent of such estimate. And where no tax for building such house shall have been voted by such district within thirty days from the time of holding the first meeting to consider the question, then it shall be the duty of the trustee or trustees of such district to contract for the building of a schoolhouse capable of accommodating the children of the district, and to levy a tax to pay for the same, not to exceed the sum estimated as necessary by the commissioner, and which shall not be less than such estimated sum by more than 25 per cent thereof. But such estimated sum may be increased by a vote of the inhabitants at any school meeting subsequently called and held according to law.

5. To examine, under such rules and regulations as have been or may be prescribed by the State commissioner of education, persons proposing to teach common schools within his district and not possessing the commissioner's certificate of qualification or a diploma of the State normal school, and to inquire into their moral fitness and capacity, and, if he find them qualified, to grant them certificates of qualification in the forms which are or may be prescribed by the superintendent.

6. To examine any charge affecting the moral character of any teacher within his district, first giving such teacher reasonable notice of the charge, and an opportunity to defend himself therefrom; and if he find the charge sustained, to annul the teacher's certificate, by whomsoever granted, and to declare him unfit to teach; and if the teacher held a certificate of the commissioner of education or a diploma of the State normal school, to notify the commissioner forthwith of such annulment and declaration.

7. And, generally, to use his utmost influence and most strenuous exertions to promote sound education, elevate the character and qualifications of teachers, improve the means of instruction, and advance the interest of the schools under his supervision.

The commissioner may administer oaths relating to the public school affairs, and by direction of the State commissioner may subpoena witnesses. An appeal from his action may be carried to the State commissioner.

District trustees and board of education.—Each school commissioner subdivides the territory of his district into school districts, and the inhabitants of each subdivision entitled to vote shall elect by ballot one or three trustees—one retiring annually—a district clerk, and a district collector, and, if the district so determine, a treasurer. The trustee or trustees of a district compose a board, vacancies to be filled at a special meeting of the district.^a They call special meetings of the inhabitants; make out a tax list of every district tax voted by the district; purchase or lease sites for schoolhouses, and build and furnish them and hire rooms or buildings for school purposes and supply fuel and other incidentals, but the expense for furnishing and incidental running expenses shall not exceed \$50 in any one year, unless authorized by the district; insure the buildings and furniture; employ teachers and fix their compensation and term of service, but not for fewer than ten weeks unless to fill a vacancy; establish

^a Not more than one member of a family shall be a member of the same board of education in any school district.

rules for the government and discipline of the schools and the course of study to be pursued therein; see that the conditions of the school buildings are good hygienically; report to the district annually and to the school commissioner as follows: The duration of the term of schools, their expenditures for teachers' wages and for books and school apparatus, the number of children in the district schools and the sum of the days attendance; the number of children 5 to 21 residing in the district, and the names of the parents or persons with whom they reside; the number of vaccinated children of school age; the amount of money paid for teachers' wages in addition to the public money paid therefor; the amount of taxes levied in said district for purchasing schoolhouse sites, for building, hiring, purchasing, repairing, and insuring such schoolhouses, for fuel, for school libraries, or for any other purpose allowed by law, and such other information as the superintendent may require.

Whenever 15 legal voters of one or more school districts shall sign a call, a meeting shall be held for the formation of a union free-school district. Such union district shall elect not fewer than three nor more than nine trustees, one-third of whom shall retire annually, called, collectively, the board of education. This board shall have in all respects the superintendence, management, and control of said union free schools, and power to establish in the same an academical department whenever, in their judgment, it is warranted, and shall possess all the powers and privileges and be subject to all the duties in respect to the common schools which the trustees of common (district) schools possess or are subject to.

Whenever any district shall have contracted with the school authorities of any city, village, or other school district for the education therein of the pupils residing in such school district, or whenever in any school district children of school age shall reside so remote from the schoolhouse therein that they are practically deprived of school advantages during any portion of the school year, the inhabitants thereof entitled to vote are authorized to provide, by tax or otherwise, for the conveyance of any or all pupils residing therein to the schools of such city, village, or district with which such contract shall have been made, or to the school maintained in said district.

Superintendent of cities and union free-school districts.—In an incorporated village having a population of 5,000 and upward, or in any union free-school district having a like population, the board of education may appoint a superintendent of schools having such powers and duties as the board may prescribe.

Attendance (truant) officers.—City and union free-school districts shall appoint and remove at pleasure one or more attendance officers, fix their compensation, and may make regular times, in conformity with the compulsory-education law, for the performance of their duties under the supervision of the local superintendent, if there be one.

2. TEACHERS.

Appointment and qualifications—Duties—Preliminary training—Meetings.

Appointment and qualifications.—No teacher is a qualified one, within the meaning of this act, unless he possesses an unannulled diploma granted to him by the State normal school, or an unrevoked and unannulled certificate of qualification given to him by the commissioner of education, or an unexpired certificate of qualification given to him by the school commissioner within whose district he is employed.

No person shall be qualified to teach who is under the age of 18 years, nor shall a person related to a trustee by blood or marriage be employed except by the approval of two-thirds of the voters at a district meeting, nor shall the trustees contract with a teacher for more than one year in advance. No part of the school moneys apportioned to a district can be applied or permitted to be applied to the payment of the wages of an unqualified teacher, nor can they or any part of them be collected by a district tax. Any trustee who applies, or directs, or consents to the application of any such money to the payment of an unqualified teacher's wages commits a misdemeanor. Teachers shall keep, prepare, and enter in the books provided for that purpose the school lists and accounts of attendance hereinafter mentioned, and shall be responsible for their safe-keeping and delivery to the clerk of the district at the close of their engagements or terms. Willful failure to attend an institute shall be sufficient cause for the revocation of the delinquent's license.

Preliminary training.—There shall be annually appropriated out of the income

of the United States deposit fund the sum of \$30,000, and out of the free-school fund the sum of \$30,000, for the instruction of competent persons in academies and union schools in the science and practice of common school teaching under a course to be prescribed by the State commissioner of education, the academies and union schools to be designated by him with reference to the school districts in each. Every academy or union school so designated shall instruct a class of not fewer than 10 nor more than 25 scholars, each of whom shall continue under instruction not fewer than sixteen weeks, unless excused for cause by the State commissioner, who shall prescribe the conditions of admission to the classes, the course of instruction, and the rules and regulations under which said instruction shall be given, and the number of classes which may be formed in any one year, and the length of time exceeding sixteen weeks, during which such instruction may be given. Instruction is free, and the trustees of the school are allowed \$1 for each week's instruction of a scholar. The classes are subject to the visitation of the school commissioner.

[The 11 State normal schools of New York appear to have been organized by special acts under the general provisions of the act of April 7, 1866, the material features of which are as follows:

The governor, the lieutenant-governor, the secretary of state, the comptroller, the State treasurer, the attorney-general, and the commissioner of education shall constitute a commission to receive proposals in writing in regard to the establishment of normal and training schools for the education and discipline of teachers in the common schools of this State from the board of supervisors of any county, from the corporate authority of any village or city, from the board of trustees of any college or academy, and from one or more individuals; but the number of proposals accepted shall not be more than four. Such proposals shall contain specifications for the purchase of lands and the erection thereon of suitable buildings for such schools, or for the appropriation of land and buildings for such use, also the furnishing of such schools and everything necessary to their support. The proposals may have in view either the grant and conveyance of such land and premises to the State or the use of the same for a limited time, and for the gift to the State of furniture, apparatus, etc., necessary to conduct such school.

If the proposals made by any board of supervisors, or by the corporate authorities of any city or village shall be accepted, said board or corporate authorities shall have the power to raise by tax and expend the money necessary to carry the same into effect; and if in their judgment it shall be deemed expedient, they shall have power to borrow money for such purpose for any time not exceeding ten years, and at a rate of interest not exceeding 7 per cent, and issue the corporate bonds of said county, city, or village therefor.

When the said commission shall have accepted proposals it shall certify the same in writing, and then their power under this act in relation to such school shall cease, and thereupon the commissioner of education shall appoint a local board, consisting of not less than 3 persons nor more than 13 persons, who shall, respectively, hold their offices until removed by the concurrent action of the chancellor of the university and the commissioner of education, and who shall have the immediate supervision and management of such school, subject, however, to his general supervision and to his direction in all things pertaining to the school. It shall be the duty of such board to make rules and regulations for the government of such schools, subject to the approval of the commissioner of education. They shall also severally transmit through him, and subject to his approval, a report to the legislature on the 1st of January in each year, showing the condition of the school under their charge during the year next preceding, and which report shall be in such form and contain such an account of their acts and doings as the commissioner shall direct, including especially an account in detail of their receipts and expenditures, which shall be duly verified by the oath or affirmation of their chairman and secretary.

The sum of \$12,000 shall be annually appropriated for the support of each normal school, payable out of the common school fund.]

Meetings.—The State commissioner shall annually appoint a teachers' institute once in each year in each school commissioner's district for the benefit and instruction of the teachers in the public schools and intending teachers, with special reference to the presentation of subjects relating to the principles of education and methods of instruction in the various branches of study pursued in the schools. He shall also fix the duration of the institute and the number and compensation of its instructors. The school commissioner shall notify all school officers, teachers, and candidates for teacher's certificate of the time

and place of the institute and assist the conductor, and he has the right, when appointed, to hold an institute in any school building without expense to the State beyond allowance for janitor's fees and lights and fuel. During the duration of an institute all the schools of a district shall be closed. Union school districts of 5,000, employing a superintendent, may close or not. There shall be annually appropriated out of the free school fund the sum of \$30.00 for the maintenance of teachers' institutes. A town at its annual meeting may pension teachers who have served twenty-five years continuously.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Common schools shall be free to all 5 to 21 years of age, but children 4 years of age or more shall be admitted to kindergartens. Cities, incorporated villages, and union and special districts may establish separate schools for the instruction of colored youth 5 to 20 years of age.

Every child between 8 and 16 years of age in proper physical and mental condition to attend school shall regularly attend upon instruction at a school in which at least six common school branches of reading, spelling, writing, arithmetic, English grammar, and geography are taught, or upon equivalent instruction by a competent teacher elsewhere than at a school, as follows: Every such child between 14 and 16 years of age, not regularly and lawfully engaged in any useful employment or service, and every such child between 8 and 14 years of age shall so attend upon instruction as many days annually during the period between the 1st days of October and the following June as the public school of the district or city in which such child resides shall be in session during the same period. Every boy between 14 and 16 years of age who is engaged in any useful employment or service in a city of the first class or a city of the second class and who has not completed such course of study as is required for graduation from the elementary public schools of such city and who does not hold either a certificate of graduation from the public elementary school or the pre-academic certificate issued by the regents of the University of the State of New York or the certificate of the completion of an elementary school issued by the department of public instruction shall attend the public evening schools of such city or other evening schools offering an equivalent course of instruction for not less than six hours each week for a period of not less than sixteen weeks in each school year or calendar year. If any such child shall so attend upon instruction elsewhere than at a public school, such instruction shall be at least substantially equivalent to the instruction given to children of like age at the public school of the city or district in which such child resides; and such attendance shall be for at least as many hours of each day thereof as are required of children of like age at public schools, and no greater total amount of holidays and vacations shall be deducted from such attendance during the period such attendance is required than is allowed in such public school to children of like age. Occasional absences from such attendance, not amounting to irregular attendance in the fair meaning of the term, shall be allowed upon such excuses only as would be allowed in like cases by the general rules and practice of such public school.

The teacher of every school shall keep an accurate record of the attendance of all children between 8 and 16 years of age, showing such attendance each day by the year, month, day of the month, and day of the week, and the number of hours in each day thereof; and each teacher upon whose instruction any such child shall attend elsewhere than at a public school shall keep a like record of such attendance.

Such record shall at all times be open to the attendance officers or other persons duly authorized by the school authorities [this term means the trustees or board of education or corresponding officers, whether one or more, by whatever name known, of a city union free school district, common school district, or school district created by special law] of the city or district, who may inspect or copy the same; and every such teacher shall fully answer all pertinent and reasonable inquiries made by such school authorities, inspectors, or other persons; and a willful neglect or refusal so to answer any such inquiry shall be a misdemeanor.

Duties of persons in parental relation to children.—Every person in parental relation to a child between 8 and 16 years of age, in proper physical and mental condition to attend school, shall cause such child to so attend upon instruction, or shall present to the school authorities of his city or district proof by affidavit

that he is unable to compel such child to so attend. A violation of this section shall be a misdemeanor, punishable for the first offense by a fine not exceeding \$5, and for each subsequent offense by a fine not exceeding \$50, or by imprisonment not exceeding thirty days, or by both such fine and imprisonment.

Courts of special sessions and police magistrates shall, subject to removal as provided in sections 57 and 58 of the code of criminal procedure, have exclusive jurisdiction in the first instance to hear, try, and determine charges of violations of the foregoing provisions within their respective jurisdictions.

Persons employing children unlawfully to be fined.—It shall be unlawful for any person, firm, or corporation to employ any child under 14 years of age, in any business or service whatever, during any part of the term during which the public schools of the district in which the child resides are in session; or to employ any child between 14 and 16 years of age who does not, at the time of such employment, present a certificate signed by the superintendent of schools or by the principal or the principal teacher of the city or district in which the child resides or by the principal or the principal teacher of the school where the child has attended or is attending, or by such other officer as the school authorities may designate, certifying that such child during the school year next preceding his application for such certificate has attended for not less than 130 days in such city or district and that such child can read and write easy English prose and is familiar with the fundamental operations of arithmetic; or to employ, in a city of the first class or a city of the second class, any child between 14 and 16 years of age who has not completed such course of study as the public elementary schools of such city require for graduation from such schools and who does not hold either a certificate of graduation from the public elementary school or the pre-academic certificate issued by the regents of the University of the State of New York, or the certificate of the completion of an elementary school issued by the department of public instruction, unless the employer of such child, if a boy, shall keep and shall display in the place where such child is employed and shall show whenever so requested by any attendance officer, factory inspector, or representative of the police department, a certificate signed by the school authorities or such school officers in said city as said school authorities shall designate, stating that said child has been in attendance upon an evening school for not less than six hours each week for such number of weeks as will, when taken in connection with the number of weeks such evening school will be in session during the remainder of the current or calendar year, make up a total attendance on the part of said child in said evening school of not less than six hours per week for a period of not less than sixteen weeks, and any person who shall employ any child contrary to the provisions of this section or who shall fail to keep and display certificates as to the attendance of employees in evening schools when such attendance is required by law shall, for each offense, forfeit and pay to the treasurer of the city or village, or to the supervisor of the town in which such child resides a penalty of \$50, the same, when paid, to be added to the public school moneys of the city, village, or district in which such child resides.

The school authorities of any city or school district may establish schools, or set apart separate rooms in public school buildings, for children between 8 and 16 years of age, who are habitual truants from instruction upon which they are lawfully required to attend, or who are insubordinate or disorderly during their attendance upon such instruction, or irregular in such attendance. Such school or room shall be known as a truant school; but no person convicted of crimes or misdemeanors, other than truancy, shall be committed thereto. Such authorities may provide for the confinement, maintenance, and instruction of such children in such schools; and they, or the superintendent of schools in any city or school district, may, after reasonable notice to such child and the persons in parental relation to such child, and an opportunity for them to be heard, and with the consent in writing of the persons in parental relation to such child, order such child to attend such school, or to be confined and maintained therein, under such rules and regulations as such authorities may prescribe, for a period not exceeding two years; but in no case shall a child be so confined after he is 16 years of age. Such authorities may order such a child to be confined and maintained during such period in any private school, orphans' home or similar institution controlled by persons of the same religious faith as the persons in parental relation to such child, and which is willing and able to receive, confine, and maintain such child, upon such terms as to compensation as may be agreed upon between such authorities and such private school, orphans' home, or similar institution. If the persons in parental relation to

such child shall not consent to either such order, such conduct of the child shall be deemed disorderly conduct, and the child may be proceeded against as a disorderly person, and upon conviction thereof, if the child was lawfully required to attend a public school, the child shall be sentenced to be confined and maintained in such truant school for a period not exceeding two years; or if such child was lawfully required to attend upon instruction otherwise than at a public school, the child may be sentenced to be confined and maintained for a period not exceeding two years in such private school, orphans' home or other similar institution, if there be one, controlled by persons of the same religious faith as the persons in parental relation to such child, which is willing and able to receive, confine, and maintain such child for a reasonable compensation. Such confinement shall be conducted with a view to the improvement and to the restoration, as soon as practicable, of such child to the institution elsewhere, upon which he may be lawfully required to attend. The authorities committing any such child, and in cities and villages the superintendent of schools therein, shall have authority, in their discretion, to parole at any time any truant so committed by them. Every child suspended from attendance upon instruction by the authorities in charge of furnishing such instruction, for more than one week, shall be required to attend such truant school during the period of such suspension. The school authorities of any city or school district, not having a truant school, may contract with any other city or district having a truant school, for the confinement, maintenance, and instruction therein of children whom such school authorities might require to attend a truant school, if there were one in their own city or district. Industrial training shall be furnished in every such truant school. The expense attending the commitment and cost of maintenance of any truant residing in any city or village employing a superintendent of schools shall be a charge against such city or village, and in all other cases shall be a county charge.

The school authorities of any city or school district not having a truant school may contract with any other city or district or county having a truant school for the confinement, maintenance, and instruction therein of children whom such school authorities might require to attend a truant school if there were one in their own city or district. Industrial training shall be furnished in every such truant school.

The commissioner of education has the power to employ assistants. It shall be the duty of such assistants to make investigation and to report to said commissioner under his instructions the extent to which said compulsory-education law is complied with in the cities and school districts, and perform such other duties as may be required.

The commissioner of education has the power to withhold one-half of all public school moneys from any city or school district which in his judgment willfully omits and refuses to enforce the provisions of said compulsory-education law, after due notice, so often and so long as such willful omission and refusal shall in his judgment continue; but whenever the provisions of said law have been complied with, all moneys so withheld by the commissioner of education shall be paid over by him to such city or school district. Twelve thousand dollars are appropriated to carry out the foregoing provisions regarding attendance.

Character of instruction.—The course of study is fixed by district trustees and boards of education. The injurious effects of stimulants and narcotics must be taught, and every child, by the compulsory-education act to take effect January 1, 1895, shall regularly attend instruction at a school in which at least the common school branches of reading, spelling, writing, arithmetic, English grammar, and geography are taught, if attending other than a public school. An academical department may be established in a union free school district. Local boards may establish departments for industrial training and for teaching and illustrating the manual or industrial arts and the principles underlying the same, and to erect, equip, and officer such shops as shall be necessary. The board of education or other body having supervision of the public schools in any city or union district may establish free evening schools for instruction in industrial drawing whenever the city authorities or qualified electors shall so direct. Vocal music may be introduced in the normal schools, teachers' institutes, and into union districts and cities, and drawing must be. Kindergartens may, in counties having fewer than 1,000,000 inhabitants, be established, the teachers being considered teachers of the public schools.

Text-books.—The boards of education or such bodies as perform the functions of such boards in the several cities, villages, and union free school districts of

this State shall have power and it shall be their duty to adopt and designate text-books to be used in the schools under their charge in their respective districts. In the common school districts in the State the text-books to be used in the schools therein shall be designated at the first annual school meeting held after the passage of this act by a two-thirds vote of all the legal voters present and voting at such school meeting.

When a text-book shall have been adopted for use in any of the public or common schools, it shall not be lawful to supersede the text-book so adopted by any other book within a period of five years from the time of such adoption, except upon a three-fourths vote of the board of education, or of such body as performs the functions of such board, where such board has made the designation, or upon a three-fourths vote of the legal voters present and voting at the annual school meeting in any other school district.

Any person or persons violating any of the provisions of this act shall be liable to a penalty of not less than \$50 nor more than \$100 for every such violation, to be sued for by any taxpayer of the school district and recovered before any justice of the peace, said fine, when collected, to be paid to the collector or treasurer for the benefit of said school district.

Buildings.—District trustees and boards of education have the custody of school buildings, the sites for which are purchased and the buildings erected by them when they are authorized thereto by the district. (See Organization—School commissioner.)

The flag of the United States shall be displayed upon or near every school building at the expense of the district.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—[There is a United States deposit fund which is the original sum of \$4,014,520.17 received in virtue of the act of Congress approved June 15, 1837. From the beginning \$28,000 of the income were given annually to academies, and after 1846 \$25,000 were annually added to the "common school fund," and at date \$30,000 are given to academies for the support of teachers' training classes. Of the remaining portion of the income from 1838, \$55,000 a year have been given to school district libraries, except during sixteen years, when only \$50,000 were granted. The principal is loaned through the district commissioners, about one-half being invested in that way, the other portion being invested in bonds of the United States or bonds guaranteed by them. The second fund is the "common school fund," which amounted in 1893 to \$4,373,140, the income of which is given to aid the elementary schools. The "free school fund" is the tax levied by the State each year for school purposes. There is also a "literary fund" of \$284,201, the income of which is given to "academies." The United States deposit fund and the literary fund are under the charge of the board of regents of the University of New York.]

Taxation.—There shall be raised by tax in each year upon the real and personal estate of each county within the State such sum as the legislature shall annually determine necessary for the support of common schools in the State, and the proceeds of such tax shall be apportioned and distributed as herein provided.

The moneys so raised shall be paid into the State treasury. On the first working day of each month the treasurer shall make to the commissioner of education a written statement of the condition of the free school fund. No such money shall be paid out of the treasury except upon such warrant of the commissioner, countersigned by the comptroller, referring to the law under which it is drawn. Until satisfactory evidence shall be furnished the comptroller that all moneys required by law to be raised by taxation upon a county for the support of schools throughout the State have been collected and paid or accounted for to the State treasurer, he may withhold payment; and whenever, after the 1st day of March in any year, in consequence of the failure of any county to pay such moneys on or before that day, there shall be a deficiency of moneys in the treasury applicable to the payment of such school moneys, to which any other county may be entitled, the treasurer and commissioner of education are hereby authorized to make a temporary loan of the amount so deficient, and such loan and the interest, at the rate of 12 per cent per annum, shall be a charge upon the county in

default, and shall be added to the amount of State tax and levied upon such county by the board of supervisors thereof at the next ensuing assessment.

The moneys raised by the State tax or borrowed as aforesaid to supply a deficiency thereof, and such portion of the income of the United States deposit fund as shall be appropriated, and the income of the common school fund, when the same is appropriated to the support of common schools, shall constitute the State school moneys, and shall be divided and apportioned by the commissioner of education on or before the 20th day of January in each year as hereinafter provided; and all moneys so apportioned, except the library moneys, shall be applied exclusively to the payment of teachers' wages. He shall apportion and set apart from the free school fund appropriated therefor the amounts required to pay the annual salaries of the school commissioners elected or elective under this act, to be drawn out of the treasury and paid to the several commissioners as hereinafter provided; and he shall also apportion to each of the cities of the State, and to each of the incorporated villages of the State having a population of 5,000 and upward, and to each union free school district having a like population, which employs a superintendent of schools, out of the income of the said fund, and if insufficient, the deficiency out of the free school fund so appropriated, the sum of \$800; and in case any city is entitled to more than one member of assembly, according to the unit of representation adopted by the legislature, \$500 for each additional member of assembly, to be expended according to law for the support of the public schools of the city. But the commissioner shall make no allotment to any city or district for the expenses of a superintendent unless satisfied that such city, village, or district employs a competent person as superintendent, whose time is exclusively devoted to the general supervision of the public schools of said city, village, or district; nor shall he make any allotment to any district in the first instance without first causing an enumeration of the inhabitants thereof to be made which shall show the population thereof to be at least 5,000, the expense of which enumeration, as certified by said commissioner of education, shall be paid by the district in whose interest it is made. He shall then set apart from the income of the United States deposit fund for and as library moneys such sums as the legislature shall appropriate for that purpose. He shall also set apart from the free school fund a sum not exceeding \$4,000 for a contingent fund. He shall then set apart and apportion, for and on account of the Indian schools under his supervision, a sum which will be equitably equivalent to their proportion of the State school moneys, upon the basis of distribution established by this act, such sum to be wholly payable out of the proceeds of the State tax for the support of common schools. After deducting the said amounts he shall divide the remainder of the State school moneys into two parts and shall apportion them as follows:

He shall apportion such remainder equally among the school districts and cities from which reports shall have been received in accordance with law, as follows: Making the distributive portion of each district quota \$100. To entitle a district to a distributive portion or district quota, a qualified teacher, or successive qualified teachers, must have actually taught the common school of the district for at least the term of time hereinafter mentioned during the last preceding school year. For every additional qualified teacher and his successors who shall have actually taught in said school during the whole of said term the district shall be entitled to another distributive quota; but pupils employed as monitors or otherwise shall not be deemed teachers. The aforementioned term shall be during every school year one hundred and sixty days of school, inclusive of legal holidays that may occur during the term of said schools, and exclusive of Saturday. No Saturday shall be counted as part of said one hundred and sixty days of school, and no school shall be in session on a legal holiday.

Having so apportioned and distributed the said district quota as specified in section 6 of this act, the commissioner shall apportion the remainder of said State school moneys, and also the library moneys separately, among the counties of the State according to their respective population, excluding Indians residing on their reservations, as the same shall appear from the last preceding State or United States census; but as to counties in which are situated cities having special school acts, he shall apportion to each city the part to which it shall so appear entitled, and to the residue of the county the part to which it shall appear to be so entitled. If the census according to which the apportionment shall be made does not show the sum of the population of any county or city, the commissioner shall, by the best evidence he can procure, ascertain and determine the population of such county or city at the time the census was taken and make his apportionment accordingly.

Whenever any school district shall have been excluded from participation in any apportionment made by the commissioner or by the school commissioners by reason of its having omitted to make any report required by law or to comply with any other provision of law, or with any rule or regulation made by the commissioner under the authority of law, and it shall be shown to the commissioner that such omission was accidental or excusable, he may, upon the application of such district, make to it an equitable allowance, and if the apportionment was made by himself cause it to be paid out of the contingent fund, and if the apportionment was made by the commissioners direct them to apportion such allowance to it at their next annual apportionment in addition to any apportionment to which it may then be entitled. And the commissioner may, in his discretion, upon the recommendation of the school commissioner having jurisdiction over the district in default, direct that the money so equitably apportioned shall be paid in satisfaction of teachers' wages earned. The school commissioners of the county shall distribute the sums appropriated from the State treasury and certify to the supervisor (or treasurer of the school district) of each town the amount of money apportioned to it and who disbursed the money.

Local taxes are voted by the district in meeting. These taxes are as follows: To purchase sites and build schoolhouses or to hire buildings or rooms, and to repair and furnish and meet the incidental expenses of maintaining same; to purchase maps, globes, blackboards, and other apparatus, and to purchase text-books and other supplies, not to exceed \$25 in any one year; to establish a school library, purchase the books to increase it and a case to hold it; to supply deficiencies from noncollections and embezzlements; to insure the buildings; to pay deficiencies in teachers' wages after the public (State) money has been exhausted; to satisfy judgments of record. (See Organization—School commissioner.)

NORTH CAROLINA.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—County board—County superintendent—District committee.

State board.—The State board of education consists of the governor, lieutenant-governor, secretary of state, treasurer, auditor, superintendent of public instruction, and attorney-general. It apportions the State school money and constitutes the State text-book commission, with power to adopt text-books to be used in public schools for a term of five years at a predetermined price, and has general power to regulate the public schools of the State.

State superintendent.—The State superintendent is elected quadrennially by the people. He prepares the forms and registers used in the schools, and in general shall look after and direct the system of public schools and report biennially to the governor. He shall be furnished with an office at the State capital, and expenses incidental to it. He signs requisitions on the auditor for the payment of money by the State treasurer, and is enjoined to learn and supply the educational wants of the State and make himself acquainted with the course of educational affairs in other States. For his expenses while counseling with county boards and superintendents, delivering lectures at institutes, etc., and for extra clerical assistance, \$500 is annually allowed. He is authorized by law to employ a chief clerk at a salary of \$1,000, and an additional clerk at a salary of \$1,000 to assist in distributing the loan fund, etc., and a stenographer at a salary of \$500. All public schoolhouses have to be built according to plans approved by the State superintendent. He appoints institute conductors. All school officers shall obey his instructions and accept his constructions of the school law.

County board.—The general assembly shall appoint three men in each county, of good business qualifications and known to be in favor of public education, who shall constitute a county board of education. The State board fills vacancies in county boards arising from failure of the general assembly to appoint, but after qualification vacancies can be filled by remaining members of the county boards. The county superintendent shall be the secretary and the county treasurer the treasurer of the board. The members shall not receive more than \$2 per diem and mileage. The board shall be charged with the general manage-

ment of the public schools, shall divide the county into districts, decide all controversies about the boundaries of districts, location of schoolhouses, etc., and shall see that the law is enforced. It is a corporate body, having authority to purchase and hold real and personal estate, to build schoolhouses, sell school property, fix time for opening and closing public schools, and make all just and needful rules and regulations governing the conduct of teachers and pupils as to attendance on the schools and for the discipline and general government of the schools. Appeals can be taken from county board to State board. County board has power to pass on the moral character of teachers and to dismiss teachers of bad moral character, and to issue subpoenas to compel attendance of witnesses.

The county board shall biennially elect a county superintendent, and appoint township or district committeemen, to serve two years. Three committeemen may be appointed for each township, or three committeemen for each school in the township. Township committeemen may be allowed \$1 per day for not more than four days per annum. County boards fill vacancies in committees. County boards on first Monday in January and July of each year meet to apportion school fund to various townships per capita. Before apportioning school fund the board shall reserve as a contingent fund an amount necessary to pay the salary of the county superintendent and the expenses of the board; also shall set aside as much as one-sixth, if necessary, of the total school fund to be used in securing a four-months school term in every school in the county. They may, also, before apportioning the money, reserve as a fund for building and repairing schoolhouses and for equipment in counties with a total school fund of \$5,000 or less, not more than 20 per cent thereof; in counties with a total school fund of over \$5,000 and not more than \$10,000, not more than 16 per cent thereof; in counties with a total school fund of over \$10,000 and not more than \$25,000, not more than 10 per cent thereof; in counties with a total school fund of over \$25,000, not more than $7\frac{1}{2}$ per cent thereof. Not more than one-half of the expense of building the schoolhouses can be paid out of the general fund, the other half being paid out of the funds apportioned to the districts.

County boards may apportion not to exceed \$200 for county institutes; at stated meetings held in January, April, July, and October, audit and approve treasurer's accounts, and fix maximum salary of first-grade teachers; divide the townships into convenient school districts, consulting the convenience and necessities of each race in setting the boundaries of the school district for each race, and shall establish no new school in any township within less than 3 miles of any other school, nor shall they create any school district with less than 65 children of school age, the school age being from 6 to 21 years. School districts may be formed out of portions of contiguous townships or counties by consent of county boards. County boards may receive gifts, or purchase or condemn land for schoolhouse sites; may form special tax districts, and upon petition of one-fourth of the freeholders, indorsed by the board, the county commissioners are required to call special elections to levy local tax for schools. This special tax can not exceed 30 cents on \$100 worth of property and 90 cents on the poll.

County superintendent.—The county superintendent of schools shall be elected by the county board of education biennially on the first Monday of July. He shall be at the time of his election a practical teacher, or shall have had at least two years' experience in teaching school, and shall also be a man of liberal education and shall otherwise be qualified to discharge the duties of his office. He must be of good moral character and shall hold his office for two years from date of his election. He may be removed from office for cause by the board. He shall hold two examinations a year for applicants of good moral character for teachers' certificates, have charge of the teachers' institute, hold township teachers' meetings, and with the concurrence of the school committee of the district he may suspend any teacher unfit for his place or who is rendering inadequate service for the pay received. He is subordinate to the State superintendent and the county board. He shall distribute the blank forms received from the State superintendent, and advise with district committees as to the best method of obtaining statistics. He countersigns orders on the treasurer of the county board for payment of teachers' salaries, provided the teacher has made the reports required, and shall himself report to the State superintendent annually, giving an abstract of the number, grade, race, and sex of teachers examined or approved by him, number of schools taught in the county for each race, enrollment and average attendance by sex, average length of terms of the school, average salary of teachers by race, and, in addition, the county superintendent shall report annually to the State superintendent the number of school children in the

county by race and sex, public schoolhouses and the value of school property for each race, number of institutes held, teachers attending them, and such suggestions as he may deem proper.

The compensation of the county superintendent shall be \$3 per diem, or the county board may pay an annual compensation not to exceed 4 per cent of the disbursements for the schools under his supervision; or the county board of any county whose total school fund exceeds \$15,000 may employ a superintendent for all of his time at such salary as may be fixed by said board.

School committeemen.—The county board of each county shall biennially appoint in each of the townships of the county three intelligent men of good business qualification, who are known to be in favor of public education, who shall serve for two years from the date of their appointment as school committeemen of their respective townships. Any township committee may appoint one man in each school district in the township to look after the schoolhouse and property and advise with the committee. The county board in each county may, if they deem best, instead of electing township committeemen elect for each school of the several townships three school committeemen of intelligence and good business qualification, who shall serve for two years, or till their successors are elected and qualified. All the power and duties conferred on township committeemen shall vest in the district committee when so appointed.

All school committees, whether township or district, shall meet after their qualification, elect from their number a chairman and secretary, and shall keep a record of their proceedings in a book to be kept for that purpose. The school committee shall be intrusted with the care and custody of all schoolhouses and all other public school property in the township or district, with full power to control the same as they may deem best for the interest of the public schools and the cause of education. The school committee of each township shall furnish annually to the county superintendent a census report of the school children 6 to 21 years of age in their townships or districts by name, age, sex, and race. The school committee shall be allowed a sum not exceeding 2 cents per name for all names reported between the ages of 6 and 21. They shall also report by race and sex the number of all persons between the ages of 12 and 21 who can not read and write, and the number of public schoolhouses and the value of all public school property for each race separately, and furnish to the teacher at the opening of the school a complete copy of the census furnished to the county superintendent, which shall be recorded by the teacher in a register containing the name and age of each pupil of school age in that district. Committees have authority to employ and dismiss teachers. No teacher can be employed except at an advertised meeting held for that purpose. Committees fix salaries of teachers, but can not pay more than the maximum salaries fixed by the county board for each school. The secretary of the committee shall furnish the county superintendent a copy of the contract with the teacher, and no voucher for the salary of a teacher of any school shall be signed by any county superintendent unless a copy of such teacher's contract has been filed with him. Committees shall not employ a teacher who does not hold a certificate in date from the county superintendent, nor for a longer term than the amount of money that accrues to the credit of the district for that fiscal year.

2. TEACHERS.

Appointment, qualifications, and duties—Institutes.

Appointment, qualifications, and duties.—No person shall be employed by a district or township committee to teach who does not produce a certificate from the county superintendent. No certificate can be issued to a person under 18 years of age. Teachers of second grade shall receive not more than \$25 per month. Teachers of the first grade may receive such compensation as shall be agreed upon, provided the amount does not exceed the maximum salary allowed by the county board. Teachers of third grade shall receive not more than \$20 per month, and no holder of a third-grade certificate shall be employed except as an assistant teacher. Twenty school days of not less than six hours nor more than seven hours each day shall be a month. The school term shall be continuous. County superintendents shall examine all applicants of good moral character for teachers' certificates on the second Thursday of July and October of every year, and for the examination of teachers at any other time he shall re-

quire a fee of \$1, which is turned over by the county superintendent to the treasurer of the school fund. A general average of 90 per cent and over shall entitle an applicant to a first-grade certificate, which is valid for two years; a general average of 80 per cent or more shall entitle the applicant to a second-grade certificate, which is valid for one year, and a general average of 70 per cent shall entitle an applicant to a third-grade certificate. The certificates shall be valid only in the county in which they are issued. (Diplomas from colleges are not recognized, and all teachers that teach in the public schools must have certificates from the county superintendent.)

Teachers must keep a record of the attendance of pupils, and at the end of the term report to the county superintendent the length of term of school, the race for which it is taught, the number, sex, and average daily attendance of pupils, and the number of the district, the number of children on census blank not attending school, and the number of children under 17 years of age not attending any school. Teachers shall file with their registers at the end of the school term an accurate record of the promotion, advancement, and classification of every child attending the school just closed.

Institutes.—The county board may annually appropriate not more than \$200 for the purpose of conducting one or more teachers' institutes, or two or more counties may hold a joint institute.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—White and colored pupils are to be taught separately. Also separate schools are provided for Croatan Indians. Every school to which aid is given from the public fund shall be a public school, to which all children living in the district between the ages of 6 and 21 years shall be admitted free of charge for tuition, and shall be taught four months at least. In any district where there may be a private school regularly conducted for at least six months in the year, unless such private school is a sectarian or denominational school, the school committee may contract with the teacher of such private school to give instruction to all pupils living in the district between 6 and 21 years of age without charge, and pay said teacher out of the school fund apportioned to the district. Every teacher of the public school branches in said private school shall obtain a first-grade certificate before beginning his or her work, and shall make such reports as are required of all other public school teachers. The county superintendents and committees have the same authority over these schools as over any other public school.

Character of instruction.—The branches taught in the public schools shall be orthography, defining, reading, writing, drawing, arithmetic, geography, grammar, language lessons, history of North Carolina, history of the United States, physiology, hygiene, nature and effect of alcoholic drinks, elements of civil government, elements of agriculture, and such other branches as the State board may direct.

Text-books.—The State board of education, acting as a State text-book commission, adopts books to be used in the public schools, and they shall not be changed for five years. A subcommission of from five to ten teachers or superintendents, appointed by the governor, reports to commission as to merits and demerits of all books submitted for adoption. Books are distributed through agencies or dealers or else delivered carriage prepaid at contract price.

Buildings.—The county board has complete control of all schoolhouses and other school property and may sell schoolhouses after due advertisement. To interrupt or disturb any school is a misdemeanor, punishable by fine of not more than \$50 or imprisonment not more than thirty days. Any one setting fire to a schoolhouse shall be sent to the penitentiary or the county jail and may be fined at the discretion of the court.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds.—The county board shall, on the first Monday in January and July of each year, apportion the school fund of the county to the various townships in said county per capita. (See also Organization—County board.)

The proceeds of all lands granted by the United States not otherwise appro-

priated, all sums or securities now belonging to any State fund for education, the net proceeds from the sale of swamp lands belonging to the State, and all grants, gifts, and devises shall be paid into the State treasury, and, together with so much of the ordinary revenue of the State as may be set apart for the purpose, shall be faithfully appropriated for establishing and maintaining a system of free public schools.

All moneys, securities, and other property belonging to a county school fund, the net proceeds from sales of estrays, the clear profits of all penalties and forfeitures, all fines collected in the several counties for any breach of the penal or military laws, all auctioneers' licenses and half of all the net proceeds of any tax on licenses to retailers of liquors, wines, cordials, etc., shall belong to and remain in the several counties and shall be faithfully appropriated for establishing and maintaining free public schools in the several counties.

Taxation.—In addition to the State and county capitation taxes (both together never to exceed \$2 on the poll) there shall be levied and collected every year for the maintenance of the public schools, 18 cents on every \$100 of property and credits in the State. The total poll tax for all purposes must equal the total property tax on \$300 valuation of property and 75 per cent of all poll tax goes to the public school fund. If the tax (capitation) levied by the State is insufficient to maintain one or more schools in each school district for a period of four months, then the board of county commissioners shall levy a special tax to supply the deficiency (except when the limit of 66 $\frac{2}{3}$ cents on the valuation and of \$2 on polls has been reached for State, county, and district purposes).

NORTH DAKOTA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—Board of university and school lands—County superintendent—District board—City board of education.

State superintendent.—There shall be chosen by the qualified electors of the State, at the times and places of choosing members of the legislative assembly, a superintendent of public instruction, who shall have attained the age of 25 years, and shall have the qualifications of a State elector, and be the holder of a State certificate (any State) of the highest grade, or be a graduate of some reputable university, college, or normal school. He shall hold his office at the seat of government for the term of two years from the first Monday in January following his election and until his successor is elected and qualified. Before entering upon his duties he shall give a bond in the penal sum of \$5,000, with not fewer than two sureties. He shall preserve all the matter accumulated by virtue of his office and turn it over to his successor; shall have the general supervision of the schools, and shall be a member of the board of university and school lands and of the normal-school boards of the State. He shall furnish the necessary blanks and registers and lists of publications approved by him as suitable for district libraries, prepare questions to be used in examinations for teachers' certificates, prescribe rules for conducting such examinations, mark or cause to be marked all answer papers, and issue certificates; prescribe a course of study for the State normal schools and the course of study, training, and practice of the professional department of schools designated and supported wholly or in part by the State; prescribe rules for the holding of teachers' institutes and assist thereat; print the school laws at least once in two years; meet the county superintendents of each judicial district or of two or more districts combined; make a biennial report to the governor, showing:

(1) The number of school districts, schools, teachers employed, and pupils taught therein, and the attendance of pupils and studies pursued by them; (2) the financial condition of the schools, their receipts and expenditures, value of schoolhouses and property, cost of tuition and wages of teachers; (3) the condition, educational and financial, of the normal and higher institutions connected with the school system of the State, and, as far as it can be ascertained, of the private schools, academies, and colleges of the State; (4) such general matters, information, and recommendations relating to the educational interests of the State as he may deem important.

Two thousand five hundred copies of his report shall be printed and distrib-

uted. In addition to his salary he shall receive not more than \$1,000 in any year for traveling expenses.

Board of university and school lands.—(See Finances—Funds.)

County superintendent.—There shall be elected in each county a county superintendent of schools, to serve for two years, who shall give bond with surety to the amount of \$500. No one is eligible to the office unless he or she holds a certificate of the highest county grade or its equivalent.

The county superintendent shall have the general superintendence of the public schools in his county, except those in cities, which are organized under special law. He shall visit every public school under his supervision within the county at least once each official year, and oftener if necessary to increase its usefulness; carefully observe the character and methods of instruction and the condition of the school, advise the teacher, and note in writing his proficiency; carry into effect all instructions of the State superintendent given within his authority; distribute to the proper officers and to teachers all blanks furnished him by the State superintendent and needed by such officers and teachers. He may arrange for meeting with school officers at designated times and places, due notice of which has been given, for the purpose of inspecting the district records and instructing in the manner of keeping the same and of preparing the reports of district officers. He shall visit the officers of the several school districts as often as may be necessary to secure the correct keeping of the records; prepare for and furnish to each assessor a correct sectional map showing the boundaries of school districts; decide cases of controversy, with appeal to State superintendent, and make an annual report upon such matters as the State superintendent may require. He may appoint a deputy, and is entitled to an office and postage.

The salary of the county superintendent shall be as follows: In each county having 1 school and not over 5, \$150; 6 schools and not over 10, \$300; 11 schools and not over 15, \$400; 16 schools and not over 20, \$500; 21 schools and not over 25, \$600; 26 schools and not over 30, \$700; 31 schools and not over 35, \$800; 36 schools and not over 40, \$900; 41 schools and not over 50, \$1,000, and for each additional school \$10 additional: *Provided*, That in computing the salary of the county superintendent no school or separate department in graded schools shall be included unless the same shall have been taught at least four months during the preceding year; but the compensation shall not exceed \$1,500 in any county where the number of schools does not exceed 130, and in counties where the number of schools does exceed 130 the county superintendent shall be paid \$5 for each additional school, but in no case more than \$2,000 per annum. In addition thereto he shall receive 10 cents a mile for the distance actually and necessarily traveled by him in the discharge of his duties; he shall, at the end of every three months, make and furnish to the county commissioners an itemized statement of the distance so traveled, which shall be audited and ordered paid by the board of county commissioners out of the county general fund monthly, upon the warrant of the county. In every county which shall be organized for school purposes after the passage of this act the county superintendent shall be paid a salary at the rate of \$100 a year until the first Monday in January next following his election, after which his salary shall be fixed as provided for in this paragraph.

District board.—Each civil township in every county not organized for school purposes under the district system is constituted a distinct school corporation, and when hereafter any civil township shall be organized it shall be a distinct school corporation, except as otherwise provided. There shall be elected at large in each school district three school directors and a school treasurer, the directors to serve for three years, one retiring annually, and the treasurer for two years. The three directors shall constitute the district school board, and shall have general charge and management of the schools and the care, custody, and control of school property. They shall establish or discontinue schools; employ teachers; may introduce branches in the schools other than those prescribed by law, subject to the approval of the county superintendent; may levy tax, not exceeding 30 mills on the dollar in any year, and may permit the use of the schoolhouse for purposes other than instruction when not occupied for school purposes; shall determine the length of time schools shall be kept beyond the six months required by law, and may establish high schools, if the voters sanction it. The board of school trustees shall cause the clerk to take the school census annually, including all unmarried persons 6 to 20 years of age. All reports and records of school officers and proceedings of school meetings shall be kept in the English language.

City board of education.—Any city organized for school purposes under special laws and provided with a board of education may become incorporated as an independent school district by vote of the electors. The board of education of an independent district shall consist of one member from each ward in the city, and when the city is divided into an even number of wards the city shall elect one member of said board at large; members shall hold their office for two years. The electors in each ward in said city shall elect one member of said board, and the electors of the said city shall elect one member of said board at large. The wards having even numbers shall hold their election in each year ending with an even number, and the wards having odd numbers shall hold their election in the years ending with odd numbers. The member at large shall be elected biennially in the even-numbered years.

The board shall levy from time to time by tax such sums as may be determined by it to be necessary and proper for any of the following purposes: (1) To purchase, exchange, lease, or improve sites for schoolhouses; (2) to build, purchase, lease, enlarge, alter, improve, and repair schoolhouses and their outhouses and appurtenances; (3) to purchase, exchange, improve, and repair school apparatus, books, furniture, and appendages; (4) to procure fuel and defray the contingent expenses of the board, including the expenses of the secretary; (5) to pay teachers' wages after the application of public moneys which may be by law appropriated and provided for that purpose.

In cities not organized as independent districts there shall be a board of seven members, who shall be elected by the electors at large.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—No person shall be employed as a teacher or permitted to teach in any public school who is not, when so employed, 18 years of age and the holder of a valid teacher's certificate. Every contract made by the district board with a person who is qualified to teach must be in writing, and the salaries of teachers shall be graded according to the grades of their certificates.

The State superintendent shall prepare or cause to be prepared all questions for the examination of applicants for teachers' certificates, county or State, and shall prescribe rules for conducting all examinations. He shall issue a State certificate to be valid for life, and to be known as a professional certificate. Such certificates shall be issued to those having a good moral character, who have passed a thorough examination in all the branches included in the courses of study prescribed for the common and high schools of the State, and shall entitle the holder to teach in any common or high school. Any person who is a graduate of the four years' normal course in the University of North Dakota and has had three years' successful experience as a teacher, may be granted such professional certificate without further examination: *Provided*, That if the holder of a professional certificate shall at any time cease to teach or to be engaged in other active educational work for the space of three years he shall be liable to a reexamination and to the cancellation of his certificate, subject to the rules to be prescribed by the State superintendent.

The State superintendent shall issue a "normal certificate," to be valid in any school in the State for a term of five years unless sooner revoked. Such certificate shall be issued only to those persons of good moral character who have completed the prescribed course of study in one of the normal schools of the State, or elsewhere in a normal school having an established reputation for thoroughness; but the State superintendent may examine any such applicant at his discretion. Such certificate shall not be granted unless the applicant shall have taught school successfully not less than two years: *Provided*, That any person who is a graduate of the four years' normal course in the University of North Dakota, and who has had one year's successful experience as a teacher, may be granted such normal certificate without further examination: *Provided further*, That no State certificate shall hereafter be issued by any normal school in the State. The State superintendent shall require a fee of \$5 from each applicant for a professional or normal certificate, which fee shall be used by him to aid in the establishment and maintenance of teachers' reading circles in the State. He shall revoke at any time any certificate issued in the State for any cause which would have been sufficient ground for refusing to issue the same had the cause existed or been known at the time it was issued.

The county superintendent shall hold public examination of all persons over 18 years of age offering themselves as candidates for teachers' common schools, at the most suitable places in the county, on the second Friday in January, March, May, July, September, and November of each year, and, when necessary, such examination may be continued on the following day, at which times he shall examine them by a series of written or printed questions, according to the rules prescribed by the State superintendent. If from the percentage of correct answers required by the rules and other evidence disclosed by the examination, including particularly the superintendent's knowledge and information of the candidate's successful experience, if any, the applicant is found to be a person of good moral character, to possess a knowledge and understanding, together with aptness to teach and govern, which will enable such applicant to teach in the common schools of the State the various branches required by law, said superintendent shall grant to such applicant a certificate of qualification.

Such certificates shall be of three regular grades—the first grade, for a term of three years, renewable; second grade, for a term of two years, renewable under conditions prescribed by State superintendent; third grade, for one year, may not be issued more than twice to same person, according to the ratio of correct answers of each applicant and other evidence of qualification appearing from the examination. No certificate shall be granted unless the applicant shall be found proficient in and qualified to teach the following branches of a common English education: Reading, writing, orthography, language lessons and English grammar, geography, United States history, arithmetic, and physiology and hygiene, and, for a first or second grade, can pass a satisfactory examination in theory and practice of teaching. In addition to the above, applicants for first-grade certificates, who must be 20 years of age and have taught twelve months, shall pass a satisfactory examination in civil government, physical geography, elements of natural philosophy, elements of psychology, elementary geometry, and algebra. The percentage required to pass any branch shall be prescribed by the State superintendent. In addition to these regular grades of certificates, the county superintendent may grant a permission to teach until the next regular examination to any person applying at any other time than at a regular examination who can show satisfactory reasons for failing to attend such examination, subject to rules and regulations to be prescribed by the State superintendent. Such permit shall not be granted more than once to any person. The written answers of all candidates for county certificates, after being duly examined by the county superintendent, shall be kept by him for the space of six months after such examinations, and any candidate thinking an injustice has been done him or her, by paying a fee of \$2 into the institute fund of the county and notifying both county and State superintendents of the same, shall have his or her papers reexamined by the State superintendent; the county superintendent shall, on receipt of such notice from said complaining candidate, notify the State superintendent, who shall reexamine such answers, and, if such answers warrant it, shall issue to such complaining candidate a county certificate of the proper grade. Certificates shall be valid in the county where issued, but first or second grade may be indorsed by the county superintendent of another county.

Every applicant for a county certificate shall pay \$2 to the county superintendent, \$1 to be used in support of the teachers' institute and \$1 remitted to the State superintendent to be used in employing clerical assistance in marking papers.

No teacher shall be entitled to or receive any compensation without a certificate in force to at least six weeks of the close of the term. Every teacher shall keep a school register, and at the close of each term make a school report in duplicate, one to be filed with the district clerk and one sent to the county superintendent, and no teacher shall be paid the last month's wages in any term until such term report shall be filed with and approved by the district clerk. The teacher shall give notice of the opening and probable date of closing school, and may suspend for not more than five days any pupil for cause, notifying the parent and authorities.

Preliminary training.—Two normal schools are created for the instruction of persons in the science and art of teaching public schools, one of which is endowed with 30,000 acres of land and the other with 50,000. The schools are each under a board of five trustees, who, together with the governor and State superintendent, form the board of directors of the State normal schools. The members of the board shall be appointed by the governor, with the consent

of the senate, for four years. The board of directors shall adopt a course of study which shall embrace the academic and professional studies usually taught in normal schools. The board of trustees shall have care of the property of its own school, and shall name the instructors to the board of directors, who shall employ them and fix their salaries, but not their duties.

Institutes.—The State superintendent shall prescribe rules for the holding of teachers' institutes, and after counseling and advising with county superintendents shall appoint conductors therefor. He shall also prescribe the course of instruction for institutes and reading circles. Acting under the instructions of the State superintendent, he shall convene the teachers in his county at least one Saturday in each month during which the public schools may be in progress, or, if the distance is too great, he may convene the teachers of two or more districts in each of the several portions of his county in county or district institutes or teachers' circles for normal instruction and the study of methods of teaching, organizing, and governing schools. Each teacher shall attend the full session of such institute or circle or forfeit one day's wages for each day's absence, unless distance or sickness prevents.

3. SCHOOLS.

Attendance—Employment of children—Character of instruction—High schools—Text-books—Buildings—Consolidation of rural schools.

Attendance.—The district board shall determine and fix the length of time the schools in the district shall be taught in each year and when each term of school shall begin and end. It shall so arrange such terms as to accommodate and furnish school privileges equally and equitably to pupils of all ages. Every common school shall be kept in session for not less than six months in each school year: *Provided*, That any school may be discontinued when the average attendance of pupils therein for ten consecutive days shall be less than 4, and all contracts between school boards and teachers shall contain a provision that no compensation shall be received by such teacher from the date of such discontinuance or when with the consent of a majority of the patrons of such school proper and convenient school facilities can be provided for the pupils therein in some other school. If the majority of the patrons of any school averaging for its last term 12 or more pupils in daily attendance shall petition the board to continue such school for an additional time, not exceeding nine months in any school year, the board shall continue such school for that length of time if there be funds in the treasury sufficient for that purpose.

Every parent, guardian, or other person having control of any child between 8 and 14 years of age shall be required to send such child to a public school in the district, city, town, or village in which he resides during the time school is in session; and every parent, guardian, or other person having control of any deaf child or youth between 7 and 20 years of age shall be required to send such child or youth to the School for the Deaf at the city of Devils Lake for at least eight months in each school year: *Provided*, That such parent, guardian, or other person having control of any child shall be excused from such duty by the school board of the district or the board of education of the city, town, or village whenever it shall be shown to their satisfaction, subject to appeal as provided by law, (1) that such child is taught for the same length of time in a private school approved by such board (but no school shall be approved by such board unless the branches usually taught in the public schools are taught in such school); (2) that such child has already acquired the branches of learning taught in the public schools; (3) that such child is in such a physical or mental condition (as declared by a competent physician, if required by the board) as to render such attendance inexpedient or impracticable. If no school be taught the requisite length of time within $2\frac{1}{2}$ miles of the residence of such child by the nearest road, such attendance shall not be enforced, but this provision shall not apply to deaf children in the State. The common schools shall be at all times equally free, open, and accessible to all children over 6 and under 20 years of age, residents of the school districts where they are held, or entitled to attend school under any special provisions of law, subject to such regulations as the several school boards and boards of education may prescribe equitably and justly and not in conflict with the provisions of law.

Any such parent, guardian, or other person failing to comply with the requirements of the foregoing shall, upon conviction, be deemed guilty of a misdemeanor, and shall be fined not less than \$5 nor more than \$20 for the first

offense, nor less than \$10 nor more than \$50 for the second and every subsequent offense, with costs in each case. It shall be the duty of the president of the board of education of any city, town, or village, or the president of the school board of any district, to inquire into all cases of neglect of duty prescribed in these provisions, and ascertain from the person neglecting to perform such duty the reason, if any, and to secure the prosecution of any offense occurring against the laws regarding compulsory attendance; and any such president neglecting to secure such prosecution for such offense within fifteen days after a written notice has been served by any taxpayer in a city, town, village or district (unless such person so complained of shall be excused by the board of education) shall be liable to a fine of from \$5 to \$20.

Employment of children.—No child between 8 and 14 years of age shall be employed in any mine, factory, workshop, or mercantile establishment, or, except by his parents or guardian, in any other manner, during the hours when the public schools in the city, town, village, or district are in session, unless the person, firm or corporation employing him shall first procure a certificate from the superintendent of the schools of the city, town, or village, if one be employed, otherwise from the clerk of the school board or board of education, stating that such child has attended school for the period of twelve weeks during the year, as required by law, or has been excused from attendance as provided in a foregoing paragraph; and it shall be the duty of such superintendent or clerk to furnish such certificate upon application of the parent, guardian, or other person having control of such child entitled to the same.

Every owner, superintendent, or overseer of any mine, factory, workshop, or mercantile establishment, and any other person who shall employ any child between 8 and 14 years of age contrary to the provisions of this article shall be deemed guilty of a misdemeanor, and for every such offense shall, upon conviction, be fined not less than \$20 nor more than \$50 and costs. Every person authorized to sign a certificate who certifies to any materially false statement therein shall be fined not less than \$20 nor more than \$50 and costs.

Character of instruction.—If any money belonging to any district shall be expended in supporting a school in which the English language shall not be taught [used] exclusively, the county superintendent or any taxpayer of the school corporation may recover for the corporation all such money from the officer or officers so expending it or ordering or voting for its expenditure.

Every teacher in the common schools shall teach pupils, as they become sufficiently advanced to pursue the same, the following branches: Orthography, reading, spelling, writing, arithmetic, language lessons, English grammar, geography, United States history, physiology and hygiene, giving special instruction concerning the nature of alcoholic drinks, stimulants, and narcotics and their effect upon the human system. Physiology and hygiene and the nature of alcoholic drinks, stimulants, and narcotics and their effects upon the human system shall be taught as thoroughly as any branch is taught, by the use of a text-book to all pupils able to use a text-book who have not thoroughly studied that branch, and orally to all other pupils, and when such oral instruction is given as herein required, a sufficient time, not less than fifteen minutes, shall be given to such oral instruction for at least four days in each school week. Every teacher in the schools in special districts and in cities organized for school purposes under special law shall conform to and be governed by this provision. The district board shall have power to determine what branches, if any, in addition to those required by law, shall be taught in any school, subject to the approval of the county superintendent.

It shall be the duty of the teacher to assign to each pupil such studies as he is qualified to pursue, and to place him in the proper class in any studies; in a graded school under the charge of a principal or local superintendent, such principal or superintendent shall perform this duty. In case any parent or guardian is dissatisfied with such assignment or classification, the matter shall be decided by the county superintendent.

High schools.—In any district containing four or more common schools and having an enumeration of 60 or more persons of school age residing therein, the board may call, and if petitioned so to do by ten or more voters in the district shall call, a meeting of the voters of the district, and if a majority of the voters at such meeting vote in favor of establishing a high school the meeting shall further proceed to select a site therefor and to provide for the erection or purchase of a building, or for the necessary addition to some school building, therefor. Thereupon the board shall erect or purchase a building or make such addition for such high school, as voted at such meeting, and shall establish therein

a district high school containing one or more departments, and employ a teacher or teachers therefor. Such school shall be kept in session for such time each year, not less than three months, as the board may determine. The board shall, subject to the approval of the county superintendent, grade such high school and prescribe the studies to be pursued therein, and shall have the same management and control thereof as of the common schools in the district. Two or more adjacent school districts may join in the establishment and maintenance of such high school, when empowered so to do by a majority of the voters in each district at a meeting.

Buildings.—The school board of any school district may take 2 acres or less for the site for a schoolhouse. If a petition signed by the persons charged with the support and having the care and custody of 9 or more children of school age, all of whom reside not less than $2\frac{1}{2}$ miles from the nearest school, be presented to the board asking for the organization of a school for such children, the board shall organize such school and employ a teacher therefor if a suitable room can be leased or rented; and if persons having the care and custody of 12 or more children unite in such petition, and no suitable room can be leased or rented, the board shall call a meeting of the voters for the purpose of providing a suitable schoolhouse. (See also Organization—District board.)

Consolidation of rural schools.—The school board may call, and if petitioned by one-third of the voters in the district shall call, an election to determine the question of conveying the pupils at the public expense to and from the schools already established, or of consolidating two or more common schools. If a majority are in favor of conveying the pupils to and from school at public expense, or are in favor of consolidating two or more common schools, the board shall make all necessary arrangements to carry out the same.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—All proceeds of the public lands that have heretofore been or may hereafter be granted by the United States for the support of the common schools in this State; all such per cent as may be granted by the United States on the sale of public lands; the proceeds of property that shall fall to the State by escheat; the proceeds of all gifts and donations to the State for common schools, or not otherwise appropriated by the terms of the gift, and all other property otherwise acquired for common schools, shall be and remain a perpetual fund for the maintenance of the common schools of the State. It shall be deemed a trust fund, the principal of which shall forever remain inviolate, and may be increased, but never diminished. The State shall make good all losses thereof.

The interest and income of this fund, together with the net proceeds of all fines for violation of State laws, and all other sums which may be added thereto by law, shall be faithfully used and applied each year for the benefit of the common schools of the State, and shall be for this purpose apportioned among and between all the several common school corporations of the State in the proportion to the number of children in each of school age, as may be fixed by law, and no part of the fund shall ever be diverted even temporarily from this purpose or used for any other purpose than the maintenance of common schools for the equal benefit of all the people of the State. If any portion of the interest or income aforesaid be not expended during any year, said portion shall be added to and become a part of the school fund.

The superintendent of public instruction, governor, attorney-general, secretary of state, and State auditor shall constitute the "board of university and school lands," which, subject to the provisions of law, shall have control of the appraisal, sale, rental, and disposal of all school and university lands, and shall direct the investment of the funds arising therefrom in the hands of the State treasurer.

Taxation.—Every district school board shall levy upon all the property subject to taxation in the district a tax for school purposes, all kinds authorized by law not to exceed in the aggregate a rate of 30 mills on the dollar in any one year. Such tax shall be levied by resolution of the board. The clerk shall immediately thereafter notify the county auditor, in writing, of the amount of tax so levied.

The county auditor of each county shall, at the time of making the annual assessment and levy of taxes, levy a tax of \$1 on each elector in the county for the

support of common schools, and a further tax of 2 mills on the dollar upon all the taxable property in the county, to be collected at the same time and in the same manner as other taxes are collected, which shall be apportioned by the county superintendent among the schools of the county, as provided by law, and which shall constitute the county tuition fund.

OHIO.

1. ORGANIZATION OF THE SYSTEM.

State commissioner—State board of examiners—State text-book commission—County board of examiners—School districts—Board of education—City and village examiners—City superintendent—Truant officer.

State commissioner.—There shall be elected at the general election for State officers a State commissioner of common schools, who shall hold office for three years, a vacancy to be filled by the governor. He shall give bond to the amount of \$5,000, with two or more sureties, and shall keep official books and papers at his office at the capital, where he shall be in attendance not less than ten months except when absent on public business. He shall visit annually each judicial district of the State, superintending and encouraging teachers' institutes, conferring with boards of education or other school officers, counseling teachers, visiting school's, and delivering lectures on topics calculated to subserve the interests of popular education; secure the safety and the proper application of State educational funds, and may require all persons having charge of the same to account to him; prescribe suitable forms and regulations for making all reports and conducting all necessary proceedings under the school laws, and transmit them to the local officers with instructions; prepare as many copies of the school laws as are necessary, and distribute them; make an annual report to the general assembly, or when that body is not in session to the governor, and send a copy to the legislature when it convenes. In his report he shall give the condition and amount of all funds and property appropriated to education; number of common schools; number, by sex, attending them, and the branches taught; number of private and select schools in the State, and their attendance, by sex, and the branches taught; number of teachers' institutes, the attendance thereat, number of instructors, and the amount paid to each; estimated cost of the schools, and the accounts of the expenditures of every description; plans for the management and improvement of common schools, and such other information as he may deem of importance. He shall annually require of the president, manager, or principal of every seminary, academy, and private school a report of such facts, arranged on such form as he shall furnish.

State board of examiners.—There shall be a State board of examiners, which shall consist of 5 competent persons, residents of the State, to be appointed by the State commissioner for five years, not more than 3 of whom shall belong to the same political party, one member to retire annually. Each member shall receive \$5 per diem of actual service and 6 cents per mile each way from his residence and back. The board is authorized to issue three grades of life certificates.

State text-book commission.—(See Schools—Text-books.)

County board of examiners.—There shall be a county board of examiners, to consist of 3 competent persons, to be appointed for three years by the probate judge. Two members shall have had at least two years' experience as teachers, and shall have been within five years actual teachers in properly recognized schools. They shall all be residents of the county for which they are appointed, and shall not be connected with or interested in any school for the special education or training of persons for teachers, or any other private school, or be employed as instructors in any institute in their own county, nor be an agent of or interested in any book-publishing or book-selling firm, company, or business; and violation of these provisions vacates the office held by the offender. A clerk shall be appointed from the members, who shall keep a record of the proceedings, of the certificates issued, and report to the State commissioner annually. Each board shall fix upon the time and place for holding meetings for the examination of applicants for certificates.

School districts.—The State is divided into school districts, to be styled, respectively, city districts of the first grade of the first class, of the second grade

of first class, of the third grade of the first class; city districts of the first class, city districts of the second class, village districts, special districts, and township districts. Each city having a population of 200,000 or more, including the territory annexed to it for school purposes and excluding that detached from it for school purposes, shall constitute a city district of the first grade of the first class; each city having a population of 90,000 to 200,000 shall constitute a city district of the second grade of the first class; each city having a population of 31,500 to 90,000 shall constitute a city district of the third grade of the first class; and each city having a population of 10,000 to 31,500 shall constitute a city district of the first class; each city of the second class having a population of less than 10,000 shall constitute a school district to be styled a city district of the second class; each village shall constitute a school district to be styled a village district; each organized township, exclusive of any of its territory included in a city, village, or special district, shall constitute a school district to be styled a township district. All other legally constituted districts shall be styled special districts.

Boards of education.—In city districts of the first grade of the first class (Cincinnati) the board of education shall consist of one member from each ward, who shall be an elector and shall hold for two years. But the members of such board shall not as individuals or as local committees exercise supervisory authority over the schools in the several wards or districts, or have the selection or nomination of teachers. The board shall hold regular meetings once every two weeks.

Boards of education in city districts of the second grade of the first class (Cleveland) shall consist of a school council of 7 and a school director, and shall organize by electing one of its members president and a nonmember clerk, whose salary shall not exceed \$2,000 per annum. The members shall be elected biennially, one group retiring annually. The council has legislative power and authority in regard to school affairs within its district, but every resolution involving an expenditure of money or the approval of a contract for the payment of money or the purchase, sale, lease, or transfer of property, or levying any tax, or for the change or adoption of any text-book, shall before it takes effect be presented, duly certified by the clerk to the school director, who shall sign it or return it to the council at its next meeting, and on his failure to return it as above directed the measure shall become a law; but he may approve or disapprove any part of a resolution appropriating money if the item has no bearing or connection with any other part of such resolution, and the council may override his objections by a two-thirds vote. The council shall have power to provide for the appointment of all necessary teachers and employees, to prescribe their duties, and fix their compensation.

The board of education in city districts of the third grade of the first class (Toledo) consists of 5 members elected at large on a nonpartisan ticket, the candidates being named by petition, and all the names placed on one ticket arranged alphabetically. The term of the members is five years, one being elected each year. The board is required to appoint a business manager as well as a superintendent. The business manager is ex officio member of the board, with the privilege of speaking but not voting. He is the chief executive officer of the board in all business matters.

In city districts of the second class and in village districts the board of education shall consist of 6 members, except in districts organized under a law providing for only 3 members, unless such districts elect to have 6 members; but the electors of any city district of the second class may vote that the board shall consist of as many members as the city has wards, in which case a member shall biennially be elected in each ward. In other city districts of the second class the members shall be elected to serve for three years, 2 members to retire annually if composed of 6, 1 member to retire annually if composed of 3 members.

In village districts members of the board of education shall be elected for a term of three years, 1 to retire annually, but the district may vote to increase the membership to 6, when 2 shall retire annually.

The board of education of each township district divided into subdistricts shall consist of the township clerk and one director elected for a term of three years from each subdistrict, the township clerk being ex officio clerk of the board, but having no vote except in case of a tie. The directors thus elected shall be divided into three classes, one class to retire annually. The board shall hold regular sessions on the third Monday of April, June, August, October, December, and February, and may hold special meetings. The board

may at any regular session increase or diminish the number or change the boundaries of subdistricts, and the school of a subdistrict can be suspended when the enumeration of school youth falls below 15 or when transportation is furnished the pupils of the same to other schools. When a majority of the electors of a township district vote in favor of centralizing the schools of such district all the subdistricts are abolished and a township board consisting of 5 members is elected at large and the pupils are conveyed to one or not to exceed two central schools.

In each subdistrict in a township there are two subdirectors elected for a term of three years, either a director or subdirector being elected annually for each subdistrict, said director and subdirectors composing a board of subdirectors with the power of recommending teachers to the township board for confirmation, but having no other control of the schools.

The board of education of each special district shall consist of 3 resident members having the qualifications of electors, but the electors may vote that the membership be increased to 6, one-third of the board to retire annually.

When the better accommodation of scholars makes it desirable to form a subdistrict composed of parts of two or more townships, the boards of education of the townships interested may, by mutual agreement at a joint meeting, or by three special commissioners appointed by the probate court, establish the same, the school being under the control of the board of education of the township in which the school is situated.

The boards of education of all districts are bodies politic and corporate, but when a board of education decides to dispose of any property held by it in its corporate capacity, exceeding \$300 in value, it shall sell the same at auction after thirty days' or more notice by advertisement in a newspaper and placard. All property vested in any board of education shall be exempt from tax, sale on execution, or other similar writ. Each board shall organize by choosing one of its members president, and, excepting township boards, by choosing also a clerk, who may or may not be a member. Vacancies are to be filled by the board. A majority of the board of education shall constitute a quorum. The board shall make such rules as it may deem expedient for its own government and that of its appointees and the pupils, and shall make and enforce rules for the vaccination of those attending school. The members of boards of education shall not be interested, either directly or indirectly, in any contract entered into by the boards of which they are members, or receive compensation for services rendered, except as clerk or treasurer.

The board of education of each district shall make a report to the county auditor containing a statement of the receipts and expenditures of the board, the number of schools sustained, the length of time such schools were sustained, the enrollment of pupils, the average monthly enrollment, the average daily attendance, the number of teachers employed and their salaries, the number of school-houses and schoolrooms, and such other items as the commissioners of common schools may require, said reports being consolidated by county auditors and forwarded to the State commissioner of common schools.

City and village examiners.—There shall be a board of examiners of 3 or 6 persons for each city district of the first class, to be appointed by the board of education of the district. Two of the persons appointed shall have at least two years' practical experience in teaching and shall otherwise be competent for the position and residents of the district for which they were appointed. Other city districts and village districts having a school enumeration of not less than 700 are also entitled to separate boards of examiners consisting of 3 members.

City superintendents.—Each board of education shall have the management and control of the public schools of the district with full power to appoint a superintendent and assistant superintendent of the schools, and a superintendent of buildings, whose salaries may be increased, but shall not be diminished during the term for which the appointment is made.

Truant officer.—(See Schools—Attendance.)

2. TEACHERS.

Appointments, qualifications, and duties—Institutes.

Appointment, qualifications, and duties.—No person shall be employed as a teacher in a common school who has not obtained from a board of examiners having competent jurisdiction a certificate of good moral character, stating that the holder is qualified to teach orthography, reading, writing, arithmetic, geog-

raphy, English grammar, history of the United States, civil government, physiology and hygiene, and possesses an adequate knowledge of the theory and practice of teaching, and, if required to teach other branches, that the requisite qualifications are possessed; but persons who desire or are expected to teach only special studies, such as music, drawing, painting, penmanship, gymnastics, German, or French, or any one of them, or the primary department in any graded school, may be examined in regard to such study or studies, or their special qualifications to teach in a primary department only.

The State board of examiners may issue three grades of life certificates to such as are found to possess the requisite scholarship and who exhibit satisfactory evidence of good moral character and professional experience and ability. The certificates shall be for different grades of schools, according to branches taught, and shall be valid in schools specified therein. Each applicant for a certificate shall pay to the board of examiners a fee of \$5. The boards of county examiners may grant certificates for one, two, and three years, valid in the county wherein they are issued, except in city and village districts that have boards of examiners. The examiners may grant certificates for five years to such applicants as, in addition to the necessary qualifications, have been for three years next preceding their application engaged in teaching, twelve months of which experience shall have been in one place, and such certificate shall be renewable upon the same conditions, but without examination, at the discretion of the examining board. They may also grant certificates for eight years to applicants who hold or have held a five-year certificate and have been engaged in teaching the preceding three years, eighteen months of which experience shall have been in one place; said applicant shall be examined in botany, algebra, natural philosophy, and English literature, and such certificate shall be renewable without examination, at the discretion of the board. The boards of city and village examiners may grant certificates for one, two, three, and five years under conditions similar to those governing the issuing of certificates by county boards. Each board of education shall have full power to appoint teachers, janitors, and other employees and fix their salaries, which may be increased but not diminished during the term for which the appointment is made, but no person shall be appointed for a longer time than that for which a member of the board is elected nor dismissed except for cause.

It shall be the duty of all principals and teachers of all schools, public, private, or parochial, to report to the clerk of the board of education the name, age, and residence of every pupil in attendance at their schools, together with such other facts as the clerk may require to facilitate the enforcement of the compulsory-attendance law. Principals and teachers shall report to the truant officer, the superintendent of schools, or the clerk of the board all cases of truancy or incorrigibility. No clerk of a board of education shall draw an order on the treasurer for the payment of a teacher for services until the teacher files with him such reports as are required by the State commissioner and the board of education. All teachers of common schools within any county in which a county institute is held, except those employed in city districts of the first class, may dismiss their schools for the purpose of attending during the week it is held; and boards of education of city districts of the first class within counties having an institute may, by resolution, permit teachers to attend, but no union or graded school shall be dismissed for such purpose unless a majority of its teachers assent. Teachers may suspend pupils until the meeting of the board.

Institutes.—A teachers' institute may be organized in any county by the association of not less than 30 practical teachers of common schools residing therein who shall declare their intention in writing to attend such institute, the purpose of which shall be the improvement of such teachers in their professional qualifications. Each institute shall elect annually by ballot a president, secretary, and an executive committee to manage the affairs of the institute, the president and secretary being ex officio members and officers of the committee. Said committee shall enter into a bond with sufficient surety, of double the amount of the institute fund in the county treasury, conditioned on the proper employment of the money and on reporting to the State commissioner within five days after the adjournment of the institute the number of teachers in attendance, the names of the instructors and lecturers, the amount of money received and disbursed by the committee, and such other information relating to the institute as the commissioner may require. The secretary is required to make the report, and on failure to do so forfeits to the State the sum of \$50. When a teachers' institute has not been held for two years in any county, the

State commissioner may cause an institute to be held. The board of education of each city district of the first class may provide for holding an institute yearly for the improvement of their teachers, and general meetings of the teachers of any such city district held not less than four days in any year, whether consecutive or not, for the purposes of instruction, shall be deemed to constitute a teachers' institute, and shall be sustained out of the institute fund; and if the board of any district does not provide for such institute in any year it shall cause the institute fund to be paid to the treasurer of the county, who shall place it to the credit of the county institute fund; and under such circumstances the teachers in the schools of such district shall be entitled to the advantages of the county institute. An association of teachers of several adjacent counties may organize an institute for the specific purpose of providing for the professional instruction of the teachers of the graded schools in such counties, and the boards of all city, village, and special districts within such counties may contribute from the institute and contingent funds under their control to defray the expenses, and may permit teachers employed by them to attend the institute one week. All other institutes shall continue at least four days.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—The schools of each district shall be free to all youth between 6 and 21 years of age who are children, wards, or apprentices of actual residents of the district. All parents, guardians, and other persons who have care of children shall instruct them, or cause them to be instructed, in reading, spelling, writing, English grammar, geography, and arithmetic. Every parent, guardian, or other person having charge of any child between the ages of 8 and 14 years shall send such child to a public, private, or parochial school for the full time the school attended is in session, which in no case shall be for less than 24 weeks, and said attendance shall begin within the first week of the school term unless the child is excused from such attendance by the superintendent of the public schools in city or other districts having such superintendent, or by the clerk of the board of education in districts having no superintendent or by the principal of the private or parochial school, upon a satisfactory showing either that the bodily or mental condition of the child does not permit of its attendance at school or that the child is being instructed at home by a person qualified to teach the required branches, but in case of refusal to excuse attendance an appeal may be made to the probate judge of the county upon giving a bond within ten days after such refusal. All children between the ages of 14 and 16 years not engaged in some regular employment shall attend school for the full term of the schools of the district in which they reside that are in session during the school year. For a violation of any of the foregoing provisions a parent or guardian is liable to a fine of not less than \$5 nor more than \$20, and upon failure to pay the same may be imprisoned not less than ten nor more than thirty days.

No child under 14 years of age shall be employed while the public schools are in session unless he present to the person employing him a certificate of his age and that he has successfully completed the studies of reading, spelling, writing, English grammar, geography, and arithmetic, or, if between the ages of 14 and 16 years, that he can read and write legibly the English language. Every person, company, or corporation employing any child under 16 years of age shall exact such certificate as a condition of employment, and shall permit a truant officer to examine same upon request; and anyone employing a minor contrary to these provisions shall be fined from \$25 to \$50. All minors between 14 and 16 who can not read and write the English language shall attend school for the full time it is in session, or until they can secure a certificate from the superintendent or clerk that they can read and write said language.

Every child between the ages of 8 and 14 years, and every child between the ages of 14 and 16 years unable to read and write the English language or not engaged in some regular employment, who is a habitual truant from school, or who while in attendance at any public, private, or parochial school is incorrigible, vicious, or immoral in conduct, or who habitually wanders about the streets and public places during school hours, having no business or lawful occupation, shall be deemed a juvenile disorderly person and be subject to the provisions of this act for enforced attendance.

To aid in the enforcement of the law in regard to attendance, truant officers

shall be appointed and employed as follows: In city districts the board of education shall appoint and employ one or more truant officers; in special, village, and township districts the boards of education shall appoint a constable or other person as truant officer. The compensation of the truant officer shall be fixed by the board appointing him. The truant officer shall be vested with police powers and shall have authority to enter workshops, factories, stores, and all other places where children may be employed, and do whatever may be necessary in the way of investigation or otherwise to enforce this law. He is authorized to take into custody the person of any youth who violates the provisions of the compulsory-attendance act, and shall conduct said youth to the school he has been attending or which he should rightfully attend. The truant officer shall institute proceedings against any officer, parent, guardian, person, or corporation violating the law regarding attendance at school, and shall otherwise discharge the duties prescribed in this law and perform such other services as the superintendent of schools or the board of education may deem necessary to preserve the morals and secure the good conduct of school children and to enforce the law. The truant officer shall keep a record of his transactions for the inspection and information of the superintendent of schools and the board of education, and shall make daily reports to the superintendent of schools during the school term in cities and to the clerk of the board of education as often as required by him in special, village, and township districts, suitable blanks being furnished him.

It shall be the duty of all principals and teachers of all schools—public, private, and parochial—to report to the clerk of the board of education of the city, special, village, or township district in which the schools are situated, the name, age, and residence of every pupil in attendance, together with such other facts as the clerk may require in order to facilitate the execution of the law regarding attendance, and the clerk shall furnish blanks for such purpose, and such report shall be made during the last week of each month from September to June, inclusive, of each year. It shall be the further duty of such principals and teachers to report to the truant officer, the superintendent of public schools, or the clerk of the board of education all cases of truancy or incorrigibility in their respective schools as soon as practicable after the offense has been committed.

On the request of the superintendent of schools or the board of education, or when it otherwise comes to his notice, the truant officer shall examine into any case of truancy within his district and warn the truant and its parents, guardian, or other person in charge, in writing, of the final consequences of truancy if persisted in. When any child between the ages of 8 and 14 years, or 14 and 16 years, who can not read and write the English language or is not engaged in some regular employment, is not attending school, in violation of the law, the truant officer shall notify the parent, guardian, or other person in charge of such child of that fact, and require such parent, guardian, or other person in charge to cause the child to attend some recognized school within two days from the date of the notice; and it shall be the duty of the parent, guardian, or other person in charge of the child so to cause its attendance at some recognized school. Upon failure to do so the truant officer shall make complaint against the parent, guardian, or other person in charge of the child in any court of competent jurisdiction in the city, special, village, or township district in which the offense occurs. For such failure and upon conviction the parent, guardian, or other person in charge shall be fined not less than \$5 nor more than \$20, or the court may, in its discretion, require the person so convicted to give a bond in the penal sum of \$100, with sureties, to the approval of the court, conditioned that he or she will cause the child under his or her charge to attend some recognized school within two days thereafter, and to remain at such school during the term prescribed by law; and upon the failure or refusal of any such parent, guardian, or other person to pay said fine or furnish said bond according to the order of the court, then said parent, guardian, or other person shall be imprisoned in the county jail not less than ten nor more than thirty days.

If the parent, guardian, or other person in charge of any child shall, upon the complaint under the provision immediately preceding, for failure to cause the child to attend a recognized school, prove inability to do so, then he or she shall be discharged, and thereupon the truant officer shall make complaint that the child is a juvenile disorderly person. If such complaint be made before any mayor, justice of the peace, or police judge it shall be certified by such magistrate to the probate judge. The probate judge shall hear such complaint, and if he determine that the child is a juvenile disorderly person within the mean-

ing of the provision regarding habitual truants or incorrigible, vicious, and immoral children, he shall commit the child, if under 10 years of age and if eligible for admission, to a children's home, or, if not eligible, then to a house of refuge, if there be one in the county, or the boys' industrial school or the girls' industrial home, or some other juvenile reformatory. No child over 10 years of age shall be committed to a county children's home, and any child committed to a children's home may on the request of trustees of such home, and on its being shown that it is vicious and incorrigible, be transferred by the probate judge to the boys' industrial school or the girls' industrial home. A child committed to any juvenile reformatory under the law requiring attendance shall not be retained there beyond the age of 16 years, and may not be discharged sooner by the trustees under the restrictions applicable to other inmates. Any order of commitment to a juvenile reformatory may be suspended in the discretion of the probate judge for such time as the child may regularly attend school and properly conduct itself. The expense incurred in the transportation of a child to a juvenile reformatory and the costs in the case in which the order of commitment is made shall be paid by the county from which the child is committed after the manner provided in section 759 of the revised statutes: *Provided*, That if for any cause the parent, guardian, or other person in charge of any juvenile disorderly person shall fail to cause such person to attend school, then complaint against such juvenile disorderly person shall be made, heard, and determined in like manner as provided in each case the parent proves inability to cause such juvenile disorderly person to attend school.

When any truant officer is satisfied that any child compelled to attend school is unable to because absolutely required to work at home or elsewhere in order to support itself or help support or care for others legally entitled to its services who are unable to support or care for themselves, the truant officer shall report the case to the authorities charged with the relief of the poor, who shall thereupon afford such relief as will enable the child to attend school the time each year required under this act. Such child shall not be considered or declared a pauper by reason of the acceptance of the relief herein provided for. In case the child or its parents or guardian refuse or neglect to take advantage of provisions thus made for its instruction, such child may be committed to a children's home or juvenile reformatory. Boards of education, in all cases where relief is necessary, shall furnish text-books free of charge, and said boards may furnish any other relief they may deem necessary.

The provisions of this act shall apply to children entitled, under existing statutes, to attend school at the institution for the deaf and for the blind, so far as the same are properly enforceable.

Any officer, principal, teacher, or person mentioned in the act for enforced attendance neglecting to perform any duty imposed upon him shall be fined not less than \$25 nor more than \$50 for each offense. Any officer or agent of any corporation violating any provision of this act, who participates or acquiesces in or is cognizant of such violation, shall be fined not less than \$25 nor more than \$50. Any person who violates any provision of the act for enforced attendance, for which a penalty is not elsewhere provided, shall be fined not more than \$50. Mayors, justices of the peace, police judges, and probate judges shall have jurisdiction to try the offenses described in this act, and their judgment shall be final. When complaint is made, information filed, or indictment found against any corporation for violating any provision of the law for enforced attendance, summons shall be served, appearance made, or plea entered, as provided in section 7231, revised statutes, except that in complaints before magistrates service shall be made by the constable. In all other cases process shall be served and proceedings had as in cases of misdemeanor. In every case of complaint against a child involving commitment to any children's home or juvenile reformatory, the board of county visitors shall be notified and must attend and protect the interests of the child on the hearing, as provided in the revised statutes of the State; and the order of the commitment of the child to a State reformatory must show that the county visitors were so notified and attended the hearing. All fines shall be paid into the school funds of the district, and boards of education are authorized to employ legal counsel for the prosecution of compulsory attendance cases.

Every person who after being once convicted for violating any of the provisions of the law for enforced attendance shall be convicted of again violating them or any of them, in addition to the punishment by way of a fine elsewhere provided for, shall be imprisoned not less than ten days nor more than

thirty days. On complaint before a mayor, justice of the peace, or police judge of a second violation of this act, involving the punishment of imprisonment, if a trial by jury be not waived, a jury shall be chosen and the case tried after the manner provided in section 3718a, revised statutes.

It is hereby made the duty of every board of education to provide sufficient accommodations in the public schools for all children in their district compelled to attend the public schools under the provisions of this act. Authority to levy the tax and raise the money necessary for such purpose is hereby given the proper officers charged with such duty under the law.

No person or officer instituting proceedings under this act shall be required to advance or give security for costs; and if a defendant is acquitted or discharged, or if convicted and committed to jail in default of payment of fine and costs, the justice, mayor, police judge, or probate judge before whom such case was brought shall certify such costs to the county auditor, who shall examine and, if necessary, correct the account, and issue his warrant to the county treasurer in favor of the respective persons to whom such costs are due for the amount due to each.

No pupil shall be suspended from school by a superintendent or teacher except for such time as may be necessary to convene the board of education, and no pupil shall be expelled except by a vote of two-thirds of such board, and not until the parent or guardian has been notified and has been given opportunity to be heard. But no pupils shall be expelled or suspended from any school beyond the current term thereof.

Character of instruction.—Each board of education shall establish a sufficient number of elementary schools to provide for the free education of the youth of school age within the district under its control, at such places as will be most convenient for the attendance of the largest number of such youth, and shall continue each and every elementary day school so established not less than twenty-four nor more than forty weeks in each school year; and each township board of education shall establish and maintain at least one elementary school in each subdistrict under its control, unless other provision is made by the board, as authorized by law.

An elementary school is defined as a school in which instruction and training are given in spelling, reading, writing, arithmetic, English grammar and composition, geography, history of the United States (including civil government) and physiology; but boards of education may cause instruction and training to be given in vocal music, drawing and other branches which they may deem advisable for the best interests of the schools under their charge.

A high school is hereby defined as a school of higher grade than an elementary school, in which instruction and training are given in approved courses in the history of the United States and other countries, composition, rhetoric, English and American literature, algebra, geometry, natural science, political or mental science, ancient or modern foreign languages, or both, commercial and industrial branches, or such of the above-named branches as the length of its curriculum may make possible, and such other branches of higher grade than those to be taught in the elementary schools and such advanced studies and advanced reviews of the common branches as the board of education may direct.

A college is hereby defined as a school of a higher grade than a high school, in which instruction in the high school branches is carried beyond the scope of the high school and other advanced studies are pursued, or a school in which special, technical, or professional studies are pursued, and which may, when legally organized, have the right to confer degrees in agreement with the terms of the law regulating its practices or its character, or, in the want of legislative direction, in agreement with the practices of the better institutions of learning of their respective kinds in the United States.

The high schools of the State of Ohio shall be classified into schools of the first, second, and third grades. A high school of the first grade shall be a school in which the courses offered shall cover a period of not less than four years of not less than thirty-two weeks each, in which not less than 16 courses shall be required for graduation; a high school of the second grade shall cover a period of not less than three years of not less than thirty-two weeks each, in which not less than 12 courses of study shall be required for graduation; a high school of the third grade shall cover a period of not less than two years of not less than twenty-eight weeks each, in which not less than 8 courses of study shall be required for graduation, and all public schools of a less grade

shall be denominated as elementary schools. A course of study shall consist of not less than 4 recitations a week continued throughout the school year.

A diploma shall be granted by the board of education to anyone completing the curriculum in any high school, which diploma shall state the grade of the high school issuing the same, as certified by the State commissioner of common schools, and shall be signed by the president and clerk of the board of education, the superintendent and the principal of the high school, if such there be, and shall bear the date of its issue. A certificate shall also be issued to the holder of each diploma, in which shall be stated the grade of the high school, the names and extent of the studies pursued, and the length of time given to each, to be certified to in the same manner as set forth for a diploma. And any holder of a diploma from a high school of the first grade shall be entitled to a certificate of admission, without examination, to any college of law, medicine, dentistry, or pharmacy in the State of Ohio, when the holder thereof shall have completed such courses in science and language as shall be prescribed by the legally constituted authorities regulating the entrance requirements of said college, except such privately endowed institutions as may require a higher standard for entrance examinations than herein provided. And any holder of a diploma from any grade of high school, or of a teacher's certificate from a county or city board of teachers' examiners, when such holder has pursued his studies under private tutorage or in an office, shall be eligible to take the examination for admission to the practice of law or to take the examination prescribed to enter a college of law, medicine, dentistry, or pharmacy, except such privately endowed institutions as may require a higher standard for entrance examinations than herein provided.

The clerk of the board of education of each district maintaining a high school is required to report such information in regard to the same as may be required by the State commissioner of common schools, and said commissioner shall classify the high schools of the State into first, second, and third grades, upon the information so filed or from personal inspection.

Any board of education may establish one or more high schools, whenever it deems the establishment of such school or schools proper or necessary for the convenience or progress of the pupils attending the same, or for the conduct and welfare of the educational interests of the district, and such school or schools, when so established, shall not be discontinued under three years from the time of the establishment thereof, except by a vote of three-fourths of all the members of the board of education of the district, and at a regular meeting.

Township boards of education shall have full control of township high schools in respect to the employment and dismissal of teachers, providing the necessary schoolhouses or rooms, furnishing the same, and making any other necessary provisions. Said board shall also regulate the admission of pupils to such schools according to age and attainments, and shall continue said schools not less than twenty-eight nor more than forty weeks in any school year.

Two or more adjoining townships, or a township and a special or village district situated within the boundaries of said township, may be united for high school purposes by a vote of the electors thereof.

In any school district or part thereof parents or guardians of youth of school age may petition the board of education to organize an evening school. The petition shall contain the names of not less than 25 persons of school age who will attend such school, and who, for reasons satisfactory to the board, are prevented from attending day school. The board may discontinue the school when the average attendance falls below 12.

The board of any city, special, or village school district may establish a public kindergarten in connection with the public schools for children 4 to 6 years of age, and may make a special tax levy of one mill for such purpose.

Text-books.—Any publisher or publishers of school books in the United States desiring to offer school books for use by pupils in the common schools of Ohio as hereinafter provided shall, before such books may be lawfully adopted and purchased by any school board in this State, file in the office of the State commissioner of common schools a copy of each book proposed to be so offered, together with the published list wholesale price thereof; and no revised edition of any such book shall be used in the common schools until a copy of such revised edition shall have been filed in the office of the said commissioners, together with the published list wholesale price thereof. The said commissioner shall carefully preserve in his office all such copies of books and the prices thereof so filed. Whenever any book and the price thereof shall be so filed in the commissioner's office, a commission consisting of the governor, the secretary of

State, and the State commissioner of common schools shall immediately fix the maximum price at which such books may be sold to or purchased by boards of education as hereinafter provided, which maximum price so fixed on any book shall not exceed 75 per cent of the published list wholesale price thereof, and the State commissioner of common schools shall immediately notify the publisher of such books so filed of the maximum price so fixed. If the publisher so notified shall notify the commissioner in writing that he accepts the price so fixed, and shall agree in writing to furnish such book during a period of five years at the price so fixed, such written acceptance and agreement shall entitle said publisher to offer said book so filed for sale to said board of education for use by the pupil under the terms of this act. The said commissioner shall, during the first half of the month of June in each year, furnish to each board of education the names and addresses of all publishers who during the year shall have agreed in writing to furnish their publications upon the terms provided. And it shall not be lawful for any board of education to adopt or cause to be used in the common schools any book whose publisher shall not have complied as to said book with the provisions of this act.

If any publisher who shall have agreed in writing to furnish books shall fail or refuse to furnish such books adopted as herein provided to any board of education, it shall be the duty of said board at once to notify the said commission of such failure or refusal; the commission shall at once cause an investigation of such charge to be made, and if the same is found to be true the commission shall at once notify said publisher and each board of education in the State that said book shall not hereafter be adopted and purchased by boards of education, and said publisher shall forfeit and pay to the State of Ohio \$500 for each failure, and the amount when collected shall be paid into the State treasury to the credit of the common-school fund of the State.

Each board of education, on receiving the statements above mentioned from said commissioner, shall, on the third Monday in August thereafter, meet and determine by a majority vote the studies to be pursued, and which of said text-books so filed shall be used in the schools under its control; but no text-books so adopted shall be changed, altered, or revised, nor shall any other text-book be substituted therefor for five years after the date of the selection and adoption thereof without the consent of three-fourths of all the members elected given at a regular meeting; and each board of education shall cause it to be ascertained and at regular meetings in April and August shall determine which and the number of each of said books the schools under its charge shall require until the next regular meetings in April and August; and shall cause an order to be drawn for the amount in favor of the clerk of the board of education, payable out of the contingent fund; and said clerk shall at once order of the publisher said books so agreed upon by the board, and the publisher on the receipt of such order shall ship such books to said clerk without delay, and the clerk shall forthwith examine such books, and if found right and in accordance with said order remit the amount to said publisher, and the board of education shall pay all charges for the transportation of such books out of the school contingent fund; but if said boards of education can at any time secure of the publishers books at a price less than said maximum price it shall be its duty so to do, and may without unnecessary delay make effort to secure such lower price before adopting any particular text-book. Each board of education shall make all necessary provisions and arrangements to place the books so purchased within easy reach of all pupils in their district, and for that purpose may make such contracts and take such security as they may deem necessary for the custody, care, and sale of such books and accounting for the proceeds; but not to exceed 10 per cent of the cost price shall be paid therefor, and said books shall be sold to the pupils of school age in the district at the price paid the publisher with not to exceed 10 per cent added, and the proceeds of such sale shall be paid into the contingent fund of such district; and whoever receives said books from the board of education for sale as aforesaid to the pupils and fails to account honestly and fully for the same, or for the proceeds, to the board of education when required, shall be guilty of embezzlement and punished accordingly: *Provided, however*, Boards of education may contract with local retail dealers to furnish said books at prices above specified, the said board being still responsible to the publishers for all books purchased by the said board of education. And when pupils remove from any district, and have text-books of the kind adopted in such district, and not being of the kind adopted in the district to which they remove, and wish to dispose of the same, the board of the district from which they

remove, when requested, shall purchase the same at the fair value thereof and resell the same as other books; and nothing in this act shall prevent the board of education from furnishing free books to pupils as provided by law.

Each board of education may furnish the necessary school books free of charge to enable the parent or guardian, without expense therefor, to comply with the requirements of the compulsory education law, the same to be paid for out of the contingent fund; but such pupils as are already wholly or in part supplied with necessary school books shall be supplied free of charge only as other or new books are needed, and all school books furnished as herein provided shall be considered and be the property of the district and loaned to the pupils on such terms and conditions as each board may prescribe.

Buildings.—The board of education of any district is empowered to build, enlarge, repair, and furnish the necessary schoolhouses, purchase or lease sites therefor or rights of way thereto. When in the judgment of any board of education it would be for the advantage of the children to have meetings of literary societies, school exhibitions, singing schools, religious exercises, select or normal schools, the board of education shall authorize the opening of such schoolhouses for such purpose, and it may authorize their use for any other lawful purpose, but not to interfere with the public school work. When the board of education determines to build, repair, enlarge, or furnish a schoolhouse the cost of which will exceed, in city districts of the first and second class, \$1,500, and in other districts \$500, except in cases of urgent necessity, or for the security and protection of school property, it shall proceed as follows:

The board shall advertise for bids for four weeks in two newspapers of general circulation in the district, or, if there be no newspaper of general circulation, then by posting such advertisements in three public places. The bids, duly sealed, shall be filed with the clerk and shall be opened at the meeting of the board immediately succeeding the last day for filing them, and they shall then be publicly read by the clerk and entered on the records of the board. Each bid shall contain the name of every person interested in the same, and shall be accompanied by a sufficient guaranty from some disinterested person that if the bid be accepted a contract will be entered into and the performance of it properly secured. When both labor and materials are embraced in the work bid for, each must be separately stated in the bid, with the price thereof. None but the lowest responsible bid shall be accepted, but the board may in its discretion reject all the bids, or accept any bid for both labor and material which is the lowest in the aggregate. Any part of a bid which is lower than the same part of any other bid shall be accepted whether the residue of the bid is higher or not, but in case the lowest bid is made by two bidders the work shall not be divided between them.

Whoever maliciously injures or defaces any schoolhouse, its fixtures, or appurtenances, or commits any nuisance therein, or maliciously trespasses its inclosed grounds or fixtures, shall be fined not more than \$100. Whoever maliciously burns or attempts to burn any schoolhouse shall be imprisoned in the penitentiary for not more than twenty years. Whoever in the night maliciously and forcibly breaks and enters any schoolhouse with intent to commit felony or to steal shall be imprisoned not less than one nor more than ten years. Whoever maliciously in the daytime breaks and enters any schoolhouse with intent to steal shall be fined not more than \$300 and imprisoned not more than six months. Whoever willfully interrupts or disturbs any assembly of persons met for a lawful purpose, or any person while he is at or about the place where such assembly is to be held or is and has been held, shall be fined not more than \$50 or imprisoned not more than ten days, or both. A member of the board of education is liable as other persons, his liability being limited to the extent that mere errors of judgment with good intent exonerate him.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—The money which has been and may hereafter be paid into the State treasury on account of sales of lands granted by Congress for the support of public schools in any original survey township or other district of country shall constitute the "common school fund," of which the auditor of State shall be superintendent, and the income of which shall be applied exclusively to the support of common schools. This common school

fund shall constitute an irreducible debt of the State, on which the State shall pay interest annually at the rate of 6 per cent per annum. When any grant or devise of land or any donation or bequest of money or other personal property is made to the State of Ohio, or to any person, or otherwise, in trust for the common school fund, the same shall become vested in that fund, and when the money arising therefrom is paid into the State treasury proper accounts thereof shall be kept by the auditor of the State, and the interest accruing therefrom shall be applied according to the intent of the grantor, donor, or devisor. The auditor shall keep an account of the fund and the interest which accrues thereon, crediting each county with its share and the amount disbursed to each.

The State shall pay interest annually at the rate of 6 per cent per annum upon all money which has been paid into the State treasury on account of sales of lands commonly called salt lands, and upon all money hitherto paid, or which may be hereafter paid, into the State treasury on account of sales of swamp lands granted to the State by Congress. The money received from such sales shall constitute an irreducible debt of the State, and the interest shall be apportioned annually on the same basis as the State common school fund. (The manner of distributing the interest arising from the salt-lands fund is the same as for the State common school fund.)

Taxation.—For the purpose of affording the advantages of a free education to all the youths of the State, there shall be levied annually a tax on the grand list of taxable property of the State, which shall be collected in the same manner as other State taxes, and the proceeds of which shall constitute the State common school fund; and for the purpose of higher agricultural and industrial education, including manual training, there shall be levied and collected in the same manner a tax on the grand list of the taxable property of the State, which shall constitute the "Ohio State University fund." The rate of such tax in each case shall be designated by the general assembly at least once in two years, and if the general assembly shall fail to designate the rate for any year, the same shall be, for the State common school fund, 1 mill, and for the Ohio State University fund, one-tenth of 1 mill, upon each dollar of valuation of such taxable property. The auditor shall apportion the State common school fund to the several counties semiannually, upon the basis of enumeration of the youths therein, as shown by the latest abstract he has received from the State commissioner of common schools.

Each board of education shall annually, at a regular or special meeting, determine as nearly as possible the entire amount of money necessary to be levied as a contingent fund for the continuance of the school or schools of the district after the State funds are exhausted, to purchase sites for schoolhouses, to erect, enlarge, purchase, lease, repair, and furnish schoolhouses, and for other school expenses; and any city, special, or village school district may levy 1 mill to support a kindergarten in connection with the public schools.

Such levy shall not exceed in cities of the first grade of the first class 3.25 mills and 1 mill additional for every 5,000 pupils over and above 25,000 enrolled in the public schools of said cities, but such additional levy shall not exceed 4.1 mills. In all other city districts the levy shall not exceed 7 mills, to which may be added 1 mill additional by a three-fourths vote of the board of education, for the purchase of sites and the erection of buildings, or for the payment of indebtedness created for such purposes. In village, special, and township districts the levy shall not exceed 10 mills.

But a greater tax than is authorized above, except in city districts of the first class, may be levied if a majority of the electors so vote. The amount to be so levied the board shall certify in writing to the auditor of the county, who shall assess the entire amount upon all property of the district, and the county treasurer shall collect the same as other taxes are collected. Each county auditor shall annually apportion the school funds of the county. The State common school fund shall be apportioned in proportion to the enumeration of youth to districts, subdistricts, joint subdistricts, and fractions of districts and joint subdistricts within the county. The common school fund shall be apportioned to the school districts and parts thereof in proportion to the enumeration of youth therein, and all other money not otherwise appropriated by law shall be apportioned annually in the same manner as the State common school fund. The local tax levy shall be paid to the several districts from which it was collected. The auditor shall collect or cause to be collected all fines and other money for the support of common schools in his county and pay the same to the county treasurer.

OKLAHOMA.

1. ORGANIZATION OF THE SYSTEM.

Territorial superintendent—Territorial board—County superintendents—District board—Cities.

Territorial superintendent.—The governor shall appoint, with the advice and consent of the Territorial council, a Territorial superintendent of public instruction, for a term of two years, at a salary of \$1,200 a year. He shall maintain an office at the seat of government, where shall be kept all books, papers, apparatus, and other property belonging to the office, including reports from county superintendents and other school officers. He shall make two bonds of \$5,000 each, with securities approved by the Territorial governor and secretary, for the faithful performance of his duties (1) as superintendent and (2) as ex officio Territorial auditor. He shall have general supervision and management of educational interests in the Territory; shall apportion between the 15th and 31st days of January and July each year, to those counties from which proper reports have been received the annual school taxes and income from the Territorial school fund in proportion to population between 6 and 21 years; print, not oftener than biennially, and distribute the school laws, interpret the same and decide controversies arising thereunder, having first submitted the statement of facts to the attorney-general for his suggestions; prepare, print, and distribute all blanks and forms necessary for teachers and school officers and secure their uniform use; visit each county at least once a year; gather information relating to school systems in other States. On December 1 preceding each regular session of the legislature the superintendent shall make and deliver to the governor a report containing: (1) Number of public schools in the Territory, number of pupils in attendance (boys and girls) and branches taught, same data regarding private schools as far as can be ascertained, similar data (except branches taught) regarding normal schools, academies, and colleges, and such other matters as he may deem expedient deducted from reports of county superintendents and other school officers touching educational conditions in the Territory; (2) statement of the condition of public school funds, including moneys, lands, or other property held in trust by the Territory for school purposes, giving the school-land account fully by counties; (3) statement of receipts and expenditures; (4) plans for the management and improvement of public schools and such other information relating to educational interests as he may deem important.

Territorial board.—The Territorial superintendent, principal of the normal school at Edmond, president of the University of Oklahoma, one city and one county superintendent, appointed by the governor for two years, shall constitute the Territorial board of education. They shall have power to grant certificates and diplomas to teachers, certificates to conductors and instructors of normal institutes, shall prepare questions for county and city examinations, shall constitute an advisory board on all matters pertaining to education in the Territory, receiving no compensation beyond necessary expenses incurred in the discharge of duty. Upon application of any college, university, or other educational institution the board may examine courses of study and work done therein, and if the same be found equal to the Territorial normal schools the board may accept certificates of graduation from such institutions in lieu of examinations on the same subjects required for Territorial certificates.

County superintendent.—Elected for two years, women eligible; must hold diploma or first-grade certificate; vacancies filled by county commissioners; salary from \$480 to \$1,200, according to scholastic population of the county; must furnish \$1,000 bond. It shall be his duty to visit each school in his county at least once in each six-months' term, noting government of school, classification of pupils, methods of instruction, and making proper suggestions in private to the teacher, also noting character and condition of schoolhouse, furniture, apparatus and grounds, and report in writing to district board, with suggestions as to improvements; examine accounts and record books of district officers, and see that they are kept and reports made as required by law; encourage the formation of teachers' associations and institutes, attending and participating in the same; hold a public meeting in each school district at least once a year for the purpose of discussing school questions and elevating the standard of education; keep his office at the county seat open at least on Saturdays; keep a complete record of his official acts, of school funds, of the name, age, post-office

address, and other data concerning each candidate for teacher's certificate and each teacher employed in the county. On the last Monday in March, June, September, and December each year he shall report to the Territorial superintendent (per forms furnished by him) detailed statistics of his official acts, prior to which his salary voucher shall not be issued, and by October 15 he shall report to the Territorial superintendent per forms furnished the statistics in detail of all educational matters in the county. He shall divide the county into convenient districts, may change same when interests require, and shall furnish the county clerk by July 4 each year a definition of their several boundaries. He shall apportion school funds among the several districts according to population between the ages of 6 and 21 (but see Finances, Territorial school fund; see also Teachers, Certificates).

District board.—The officers of each school district shall be a director, clerk, and treasurer, elected one each year for terms of three years, who shall constitute the district board. They shall hold a meeting at least five days previous to the annual meeting (see County superintendent) each year for the purpose of preparing report of clerk and treasurer to be submitted to the legal voters of the district at such annual meeting, which report shall show the school statistics of the district and shall be transmitted to the county superintendent for his annual report. For a clerk wilfully to sign a false report is a felony, punishable by from one to three years in the penitentiary. Clerk shall report to county superintendent names of district officers-elect within two weeks after election and the date of beginning of each term of school within two weeks after such beginning. (See also Schools, Buildings; Finances.) The board are the custodians of school property and the corporate representatives of the district. They employ teachers and may, in conjunction with county superintendent, dismiss them for cause. They shall furnish each teacher with a proper school register and see that it is properly kept; visit each school at least twice each term. Vacancies in board are filled by county superintendent.

Cities.—Each city having 2,500 inhabitants shall constitute a separate school district; territory outside but contiguous thereto may be attached to a city for school purposes; upon application of a majority of the electors in such territory. There shall be elected annually a board of education, consisting of one member from each ward, to hold office two years. No member of said board shall be a member of the city council, and vice versa. The board may fill vacancies in their membership pending elections, elect their own officers except treasurer, which shall be a president, vice-president, and clerk. The clerk shall give \$1,000 bond and receive such compensation as board may determine. The board shall meet the first Monday of each month, and at such other times as circumstances demand. Other powers and duties are: To exercise sole control over schools and school property in the district; establish and maintain a system of graded schools, and a high school whenever the educational interests of the city so demand; elect a superintendent, not of their number, who shall have general supervision of schools, under such regulations as board may see fit, and shall receive such compensation as board may determine; levy a tax (by June 15) for support of schools, not to exceed 15 mills on the \$1 of taxable property, to be collected by the county treasurer as other taxes, and board shall not have power to contract obligations in excess of 80 per cent of the tax so levied; issue bonds for building schoolhouses when city so elects, and levy taxes to pay interest and sinking fund. The city boards shall make (between January 1 and 15) an enumeration of children from 6 to 21 years of age, and forward result to county clerk; print an annual report of the condition of schools under their charge, containing statistics in detail.

2. TEACHERS.

Certificates—Normal institutes—Miscellaneous.

Certificates.—The board of county examiners shall be composed of the county superintendent as ex officio chairman and two competent persons appointed by him, which two shall hold diplomas or Territorial or first-grade certificates, and shall receive \$3 a day for not exceeding five days in any quarter. Public examinations shall be held at the close of each county normal institute, and on the last Friday and Saturday of January, October, and April, at such places as the chairman may designate by ten days' notice. Successful candidates who shall have satisfied the board of their good moral character and ability to teach and govern schools shall receive certificates, which shall continue in force, unless

revoked for cause, first-grade for three years, second for two, and third for one year. Applicants for first-grade certificates must be not less than 20 years of age; must have taught successfully twelve school months; make a general average of 90 per cent, and in no case less than 70 per cent, in orthography, reading, writing, English grammar, composition, geography, arithmetic, United States history, bookkeeping, physiology and hygiene,^a theory and practice of teaching, civil government, and the elements of natural philosophy. For second-grade, applicants shall be examined in the foregoing subjects, except bookkeeping and natural philosophy, shall have taught three school months, be 18 years of age, attain an average of 80 and not less than 60 in any branch. For third-grade, minimum age, 16; omit civil government; general average, 70, with a minimum of 50 in any branch; third-grade certificate shall be issued not more than twice to same person. Certificates are good only in county where issued, except that other county superintendents may indorse (fee, \$1) first-grade certificates and validate them in their counties. Upon request of a district board, county superintendents may, after satisfactory examination of applicant, issue a temporary certificate valid only in such district until next county examination; no such certificate to be issued to any person who shall have failed in a regular examination, nor to anyone more than once. Violation by county board or superintendent of any provision of law relating to issuance of certificates is a misdemeanor, punishable by fine of \$100 to \$500. (See also Organization—Territorial board.)

Normal institutes.—County superintendents shall hold in their respective counties annually for not less than two weeks a normal institute for the instruction of teachers and those desiring to teach. With the advice of the Territorial superintendent, the county superintendent shall select time and place, and shall also select a conductor and instructors for the same, each of whom shall hold a certificate from the Territorial board as to his special qualifications for such work. Each candidate for a teacher's certificate shall pay \$1, and each person attending shall pay a registration fee of \$1, to defray expenses of such institute, of which fund the county treasurer shall be custodian. Two or more sparsely settled counties may unite in holding one institute, the several superintendents designating one of their number to act for the whole, as per above provisions, and the treasurer of the county in which such institute shall be held being custodian of the normal-institute fund. [There are also normal schools at Edmond, Alva, and Weatherford, at which tuition, including music and elocution, is free to those signifying their purpose of becoming teachers in the common schools of the Territory.] (See also Organization—County superintendents.)

Miscellaneous.—Contracts for teaching school shall be in writing, with district board, shall specify wages per week or month agreed upon, and be filed in district clerk's office. Teachers may suspend any pupil guilty of immorality, of persistent violation of school regulations, which suspension shall not extend beyond the current quarter, and pupil shall have the right to appeal to district board of directors, whose decision shall be final. Teachers shall keep an accurate register of daily attendance in a blank book furnished by the board.

3. SCHOOLS.

Miscellaneous provisions—Studies—Buildings and grounds—Union graded schools—Separate schools—High schools.

Miscellaneous provisions.—The length of time that school shall be taught may be determined by the voters of each district at the annual or any special meeting, or, if they fail so to determine, then the district board shall fix the length of term. No district in which school has been taught less than three months in the year preceding shall be entitled to any allotment of school funds. Six hours make a school day, five days a week, four weeks a month. If there be not sufficient school money to support a school for the length of time determined upon, the district board may assess a tuition fee upon each pupil in proportion to the number of days of actual attendance during the term; district boards may admit pupils from without the district upon payment of a tuition

^a United States statute approved May 20, 1886: "No certificate shall be granted to any person to teach in the public schools of the District of Columbia or Territories * * * who has not passed a satisfactory examination in physiology and hygiene, with special reference to the nature and effects of alcoholic drinks and other narcotics upon the human system."

fee determined by board (see also Separate schools), otherwise tuition is free to pupils from 6 to 21 years of age. Exercises shall be held in all schools on Arbor Day. (Friday following second Monday in March) such as to encourage the planting, protection, and preservation of trees.

Studies.—In every school district shall be taught (in the English language) orthography, reading, writing, English grammar, geography, arithmetic, and such other branches as may be determined by the district board. No sectarian or religious doctrine shall be taught, but this shall not be construed to prohibit the reading of the Holy Scripture. Physiology and hygiene, with special reference to the effects of alcoholic drinks and narcotics, shall be included in the branches taught [U. S. Statute]. (See also Teachers—Certificates.)

Buildings and grounds.—District boards shall purchase, lease, build, or sell houses, sites, or other school property when so directed by the voters of a district (see also Finances—Bonds); the board shall have the keeping of school property; may appoint some suitable person to take care of school apparatus, maps, charts, etc.; may open schoolhouses for business or public meetings of religious, political, literary, scientific, mechanical, or agricultural societies. Lands selected for location or enlargement of school sites, which can not be purchased by agreement with owners at reasonable price, may be condemned, such sites not to exceed a total area of $1\frac{1}{2}$ acres. When a schoolhouse has been located upon the claim of any settler upon public or Indian lands to which said settler had no title, district board may remove same within one year after his acquirement of title; or, if said house has been built of stone, brick, or lumber costing \$500, and settler will not convey same to school board, 1 acre may be acquired by condemnation. A school site having thereon a house worth not less than \$500 shall not be moved except by a three-fifths vote of the district. A person who shall willfully destroy, injure, deface, mar, or disfigure any school building, furniture, fixture, or apparatus shall be fined \$10 to \$50. School property is exempt from taxation and shall not be taken for debt.

Union graded schools.—Two or more districts may unite in establishing a graded school for instruction in the higher branches, such action to be determined by a majority of the legal voters of such districts, who also shall elect a board of directors to control said school in like relation as district boards toward district schools. Such school shall be entitled to a share of the school fund in proportion to the number of pupils in attendance from each district so uniting, and the union district may levy taxes for providing a school building. No expenditure of more than \$200 shall be made except by written contract, and no contract involving more than \$500 shall be made except by award to the lowest responsible bidder after inviting sealed proposals. Any single district may establish a graded school on similar terms.

Separate schools.—Separate schools for white and colored children shall be maintained in all counties, and no white child shall attend nor white teacher teach a colored school, and vice versa. Districts having less than 10 children of school age of either color are not required to maintain a school for such children, if they can be transferred to schools in adjoining districts. Children may be transferred to another district school without consent of parents, unless they should have to go more than $2\frac{1}{2}$ miles to reach such school.

High schools.—Any county having 6,000 population may establish a high school by vote of a majority at any general or special election. The county commissioners shall appoint six resident freeholders of the county, not more than three of whom shall be residents of same township or city or members of same political party, who shall, with the county superintendent, constitute the board of trustees for such high school. The county superintendent shall be ex officio president of board; other members shall serve each one year, and give such bond as county commissioners may require; shall receive no compensation, except that secretary and treasurer of board may receive each not exceeding \$50 a year. Prior to June 15 each year the trustees shall present to county commissioners a certified estimate of the rate of tax (not to exceed 3 mills on \$1 of taxable property) required to raise the amount needed for payment of teachers' wages and contingent expenses, which the commissioners shall cause to be collected as other taxes. The trustees shall select the best site that can be procured without expense to the county for location of said school, shall erect building by contract, and purchase furniture, etc., if need be issuing warrants for payment of same in from five to twenty annual installments, so that no annual tax levy for payment of an installment shall exceed 3 mills on \$1 of taxable property in the county. Total cost of said building and equipment shall not exceed $1\frac{1}{2}$ per cent of the assessed valuation of the county, and said war-

rants shall not be sold at less than par. Trustees may rent suitable buildings until new ones are provided. No member of said board of trustees or the wife, son, or daughter of a member shall be employed as teacher in such school. Tuition shall be free to all eligible pupils residing in the county; if more can be accommodated, pupils from other counties may be admitted upon payment of tuition determined by trustees. Pupils graduating from the normal course in such high school shall be entitled to a second grade teacher's certificate and be admitted to the Territorial normal schools without examination; those completing the collegiate course may be admitted to the University of Oklahoma or the agricultural and mechanical college without examination. On July 1 annually the trustees shall make a complete report to county commissioners, covering all statistics regarding operations of such school for the year, which report shall be published in at least one paper in the county and a copy sent to the Territorial superintendent.

Kindergartens.—The school board of any city or district having 2,500 population may establish kindergartens for children between 4 and 6 years of age. By kindergarten shall be understood the application of the methods of Froebel, or some American development thereof, and not merely subprimary grades for children under 6 years of age. The Territorial normal schools shall establish and maintain a department for training kindergarten teachers. All teachers in kindergartens shall be graduates of an accredited kindergarten normal school, and all applications for positions as such teachers shall be subject to an examination instituted by the Territorial superintendent. An enumeration of children from 4 to 6 years of age shall be made in districts establishing kindergartens, in like manner as the enumeration of children from 6 to 21 years of age, and reported to the Territorial superintendent, who shall apportion to such districts a corresponding amount of school funds therefor.

4. FINANCES.

Territorial school fund—County taxes—Bonds.

Territorial school fund.—The Territorial superintendent shall apportion the income of the Territorial school fund and the annual taxes collected by the Territory for the support of public schools to those counties from which proper reports have been received from county superintendents, as follows: All such moneys remaining in the Territorial treasury on January 15 shall be apportioned between January 15 and 31, and all remaining July 15, between July 15 and 31, to each county in proportion to the number of children between 6 and 21 years of age resident therein, as shown by the last annual report of the county superintendent. Within five days after receiving the certificate of the Territorial superintendent informing him of the amount of such school fund which has been apportioned to his county, the county superintendent shall apportion the same (together with any unapportioned county school fund in the treasury) among the school districts and parts of districts in his county according to scholastic population as shown by the last annual reports of the respective district clerks, drawing his order on the county treasurer in favor of the respective district treasurers: *Provided*, That no district which has not maintained a common school for at least three months in the year last preceding shall be entitled to receive any portion of said funds.

County taxes.—The district clerk shall within five days report to the county clerk the amount of tax levied at the annual meeting, and for what purpose same was levied. By May 25 he shall certify to county clerk a list of all persons residing within the district liable to pay taxes. By August 25 he shall certify to the county clerk the aggregate percentage levied by the district school board on the real and personal property in the district as returned on the assessment roll of the county; and the county clerk shall place the same on the tax roll of the county, designating purpose for which said taxes were levied; and said taxes shall be collected as other taxes by the county treasurer and paid over to the treasurers of the respective school districts in the county. The board of county commissioners of each county shall levy annually upon all the taxable property in each district a tax sufficient to pay the interest accruing upon the bonds (which see) issued by such district and to provide a sinking fund for the redemption of such bonds. No fund in the hands of the county treasurer belonging to a school district shall be diverted from the object for which such fund was raised. All fines collected for viola-

tions of school laws shall be paid to the treasurer of the county wherein the suit is brought for the support of the common schools.

Bonds.—For the purpose of providing school sites and houses, the boards of directors shall have power to issue the bonds of the district in an amount not to exceed, with all outstanding indebtedness, 4 per cent of its taxable property as shown by the last assessment; and for the purpose of extending the time of payment of the school district indebtedness, they shall have power to issue bonds in a sum not to exceed its outstanding indebtedness, including bonded indebtedness; but no bonds shall be issued until, at an election called for that purpose, two-thirds of the qualified electors (women may vote) shall have so declared by ballot; and such election shall not be called except upon petition of at least one-third of such electors in the district. Bonded indebtedness shall not be created in any district wherein reside less than 8 children between 6 and 21 years of age. Bonds shall be issued in denominations of not less than \$100 nor more than \$500, bearing interest not to exceed 7 per cent, payable semi-annually.

OREGON.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State board of education—State and county boards of examiners—County superintendents—School districts—District boards—School clerks—District boundary board.

State superintendent.—A superintendent of public instruction shall be elected every four years, entering upon his duties the second Monday in January following his election; shall receive a salary of \$3,000 a year (and not exceeding \$900 traveling expenses), and be provided with an office at the State capitol. He shall exercise a general superintendence over the county and district school officers and the public schools of the State; visit, as far as practicable, every county annually in the interest of education; visit as often as practicable the principal schools of the State for the purpose of inspection and supervision; gather statistics relative to the conditions of schools, buildings, grounds, appurtenances, apparatus, libraries, conduct and standing of pupils, methods of instruction and discipline, number of pupils, teachers, salaries, courses of study, and such other data as he may deem advisable for the advancement of education and for the information of the legislature; assist in the organization and development of institute work in each county, attending county institutes within the State and educational meetings out of the State when practicable; prepare and distribute to county superintendents a uniform series of blanks, registers, forms, rules, and regulations, such as he may deem necessary for the administration of the school laws, and the secretary of state shall cause the same to be printed; act as secretary of the State board of education; annotate and compile all school laws ordered published by State board; decide questions or appeals arising under the State school laws or the rules and regulations of the State board, but he may submit the same to State board for decision or to the attorney-general for his opinion; cause to be held once a year a State teachers' association, at such time and place as will best promote the interests of education. Whenever he may deem it expedient he may issue printed letters to school officers on any subject relative to the duties of teachers, directors, pupils, parents, or guardians, the management of schools, or any other question of general or special educational interest. Biennially he shall report to the legislature, covering the following items: (1) General condition of the public schools; (2) amount of school money apportioned among the counties, and sources whence such was derived; (3) amounts raised by county and district taxes, and amounts paid for teachers' salaries, buildings, furniture, etc.; (4) text-books authorized in accordance with law; (5) rules and regulations of State board; (6) number and grade of schools in each county; (7) the number of persons in the State between the ages of 4 and 20, number attending public schools, number attending private schools, and number not attending any school; (8) any other relevant information that he may think of use to the public.

State board of education.—The governor, secretary of state, and superintendent of public instruction shall constitute the State board of education, which shall meet at the capitol on the first Monday in January and July of each year.

They shall authorize such series of text-books as shall be adopted by the text-book commission; prepare a course of study for schools in districts of the second and third classes, which shall be printed by the secretary of state and distributed by the State superintendent; order other necessary printing done by State printer; prescribe rules and regulations for the government of schools; grant State certificates and diplomas to candidates passing examinations before the State board. (See Teachers—State certificates.) The proceedings of each session of the State board shall be printed for general distribution, including the names of applicants receiving certificates.

State and county boards of examiners.—(See Teachers—County and State certificates.)

County superintendents.—Elected for four years, vacancies filled by county court; must have taught nine school months in the State and hold a first-grade or State certificate or State diploma. Salary of superintendent is specified for each county, from \$300 to \$1,500 a year. Must furnish bond in such sum as county court may direct. He shall be ex officio secretary of the district boundary board (consisting of the county court, or commissioners where the latter are a separate body), which board may make changes in district boundaries when petitioned to do so. On the first Monday in October, and at such other times during the year as he may deem advisable, he shall apportion the entire school fund in the county treasury. (See Finances—Apportionment.) He shall visit each school in his county at least once a year and seek to aid teachers toward the best methods of teaching and government, and shall secure the proper classification of pupils, enforcement of course of study, and the care and protection of school property; study to awaken among parents and children a deeper interest in the public schools; notify board of directors of any defect in schoolhouses or surroundings; and by the fourth Monday in July shall report to the State superintendent an abstract of the reports received from the several districts, adding thereto such suggestions as he may deem important, and shall make special report concerning important matters relative to the schools of his county whenever necessary or when required by the State superintendent. He shall keep a record of all persons under contract to teach in his county, with data relating to such contracts; advise and consult with boards with reference to the construction of schoolhouses and improvement of grounds; organize and hold at least three local institutes and educational meetings at such times and places in the county as he may deem most expedient, securing as far as practicable the attendance and cooperation of teachers, school officers, and parents; hold annually a county teachers' institute three days or longer for the instruction of teachers and those desiring to teach (at which attendance of teachers is compulsory); examine into correctness of reports of district clerks. (which see) and correct same when necessary; report to State superintendent the post-office address of every deaf-mute or blind person in the county between the ages of 5 and 25; examine and decide appeals from district officers and teachers, subject to appeal to State superintendent.

School districts.—Each county shall be divided into convenient school districts, classified as follows: Districts having 1,000 or more children of school age (6 to 21) shall be known as districts of the first class; more than 200 and less than 1,000, second class; less than 200, third class. Boundaries may be changed by the boundary board (see County Superintendent) and new districts established on petition of three legal voters of proposed new district; but no district shall be organized unless it contains at least 10 children of school age, and none shall continue unless it has at least 6 of school age. The legal school voters of every district shall meet on the third Monday in June every year, which shall be known as the annual school meeting, and shall hold special meetings whenever required; the director oldest in service shall be chairman, and the meeting shall have power to levy a tax upon all real and personal property in the district, and make all necessary appropriations for the support and benefit of public schools. Women may vote on school questions and be elected to all educational offices within the State. Districts shall maintain a school at least three months a year or else forfeit their share of the next annual apportionment of school funds. (See Finances—Apportionment.)

District boards.—Districts of the first class shall elect five directors, other districts three. One director shall be elected each year on the day of the annual school meeting, to serve five years in first-class districts, three years in other districts. Of the directors present at a meeting, the one oldest in service shall be chairman. Vacancies in the office of director shall be filled by the remaining directors. It shall be the duty of the board to visit and inspect their

schools; to furnish fuel (ready for use), janitor, blackboards, chalk, erasers, brooms, stoves, window curtains, reference and library books, and other apparatus, not to exceed 15 per cent of the county school-tax fund and the irreducible school fund apportioned to the district; to audit all the claims against the district. They may exclude any refractory pupil from school for the current term. When authorized by a majority vote of the school meeting, they shall purchase, lease, or build schoolhouses, buy or lease land for school purposes, furnish schoolhouses with furniture, lights, and apparatus, and, when so authorized for such purpose, may levy and collect a tax or contract a debt not exceeding 5 per cent of the taxable values of the district, or may issue or sell bonds (see *Finances—Bonds*); also, may sell, lease, or otherwise dispose of property belonging to the district. The board shall employ teachers, and make such rules and regulations for the government of teachers and pupils as are required and consistent with those of State board; shall require parents or guardians to provide pupils with books prescribed by law, but shall loan textbooks to indigent pupils when so directed by vote of the district. The board shall have entire control of public schools in their district. Any duty imposed upon them must be performed at a regular or special meeting and be made a matter of record. Consent to a measure by individual members when not in session is not an act of the board and is not binding upon the district.

District school clerks.—At the regular annual meeting each school district shall elect a school clerk, who shall give such bond and receive such compensation as the board may determine, provided that clerks of third-class districts shall not receive exceeding \$25. The clerk shall act as secretary of board and district meetings, keep records and accounts of the board, send list of district officers to county superintendent after annual school meeting, giving length of term and post-office address of each director. During the last week in February the district school clerk shall make an enumeration of children in his district between 4 and 20 years old, make an annual report to his district and forward certified copy of same to county superintendent by July 10, including scholastic census, daily attendance at all schools in district, and a list of children deaf or blind to such degree as to be unable to acquire an education in the common schools. Clerks of districts which lie in two or more counties shall report to each county superintendent data pertaining to his county.

District boundary board.—(See County superintendent—School districts.)

2. TEACHERS.

Certificates, county—State certificates and diplomas—Duties—Contracts—Institutes.

Certificates, county.—Beginning the second Wednesday of February and August and continuing three days the county board of examiners (superintendent and two others appointed by him) shall hold public examinations of applicants for teachers' county certificates, using questions prepared by State board, place to be designated by county superintendent. Every applicant shall furnish evidence of good moral character and be examined in orthography, reading, writing, mental and written arithmetic, English grammar, geography, United States history, theory of teaching, physiology and hygiene, civil government, and Oregon school law. (1) First-grade certificates, which are good in the county for three years, shall be granted to those who are 18 years of age and have taught twelve school months with success, whose general average on examination is not less than 90 per cent and not less than 70 per cent in any branch. Whenever an applicant receives on two successive examinations 90 per cent on any subject, at the next examination he shall be excused on such subjects and credited with the standing so earned. Superintendents of other counties may indorse first-grade certificates and register the same, and thus validate the same for their counties. (2) For second-grade certificates applicant must be 18 years old, have three months' successful experience teaching, and make a general average grade of 80 per cent (in no branch less than 60), certificate valid two years. No person shall receive more than one second-grade certificate in any one county unless he be ineligible to a first-grade for want of twelve months' teaching experience. (3) For a third-grade certificate applicants shall have attained the age of 18 and an average of 75 on examination; not less than 60 in any branch. Certificate is valid for one year and is not issued twice to the same person unless he lack the three months' experience in teaching requisite for a second-grade certificate. (4) A primary certificate, authorizing the holder to teach in the primary

grades not beyond third, or in a graded school as assistant, good for three years, may be issued to applicants over 18 who shall make an average of 85 (not less than 70 in any branch) upon examination in reading, writing, orthography, arithmetic, physiology, art of questioning, theory and practice of teaching, and methods. (5) A temporary permit may be issued by the county superintendent when necessary, valid only in county where issued until the next regular examination. No applicant having failed at the last regular examination shall receive a temporary permit, and no one shall receive such permit more than twice. Fees for certificates (county certificate, any grade, \$2; temporary permit, \$2.50; indorsement and register of first grade in another county, \$1) become part of the county institute fund. Certificates may be revoked for immorality, incompetency, or gross neglect of duty after the accused has been heard.

State certificates and diplomas.—The State board of education shall appoint not less than four nor more than nine professional teachers to assist in State examinations, who shall be known as the State board of examiners and shall receive \$5 a day while employed in such capacity. State examinations shall be conducted under rules and regulations prescribed by State board of education. A State certificate is valid for five years, applicants for which must have had thirty months of approved experience in teaching, nine of which in the schools of Oregon, and shall make a general average of 85, not less than 70 in any branch, upon examination in the subjects required for county certificates (which see), with the addition of algebra, bookkeeping, composition, physical geography, physics, and psychology. For a State diploma, which is good for life, an applicant shall have had sixty months of successful teaching, fifteen of which in Oregon, and shall pass examination at the same grades as for State certificate, and same subjects, with the addition of botany, plane geometry, general history, and English literature. If an applicant for a State certificate or diploma fail on one or more subjects, he need not be reexamined in those subjects wherein he was successful, provided he shall satisfactorily pass the remaining subjects at the two following examinations. Examination fee for State certificate, \$4; diploma, \$6. State board of education may grant State certificates or diplomas without examination to persons presenting authenticated papers from other States which were secured by passing equivalent examinations, and said board may grant a permit for one year to persons who hold papers of the required grade but lack the necessary teaching experience in Oregon for a State certificate. The following may be accepted in lieu of the thirty months' teaching experience required for a State certificate: (1) Diplomas from the regular State normal schools, or (2) from any normal school in the State, or (3) from any chartered institution of collegiate or university grade in the State, where the courses of (2) and (3) shall be approved by the State board of education as equivalent to those of (1): *Provided*, That the required examination shall not be waived, and no State certificate shall be issued to anyone under 21 years of age. Holders of certificates granted under these provisions may become candidates for State diplomas after they shall have taught thirty months with approved success. (See also Schools, High, Normal.)

Duties.—To maintain order in school and conduct himself before his pupils so as to command their respect; labor during school hours to advance them in their studies, to create in their minds a desire for knowledge, principle, morality, politeness, cleanliness, and the preservation of health; give all pupils suitable instruction in physiology and hygiene, with special reference to the effects of alcoholic drinks and narcotics; keep a school register showing name, sex, daily attendance, and classification of pupils, the point in State course of study where each class began and closed, and other data required by State board of education; require pupils to take proper exercise, encouraging healthful play at recess, and shall give vigilant attention to the temperature and ventilation of schoolroom, seeing to it that doors and windows are open at each intermission for the purpose of changing the air of the room; may allow pupils under 8 such recesses as that the time in school shall not exceed three and a half hours a day; shall give two exercises in free gymnastics and suitable voice and breathing exercises daily.

Contracts.—The school board shall hire teachers and shall make contracts specifying wages, number of months to be taught, and the time of beginning, as agreed upon, and shall file such contracts in the office of the district clerk and send a copy to the county clerk. No teacher shall be employed who is related by blood or marriage within the third degree to any member of the board without the concurrence of all members of board and such vote duly recorded by the clerk. Board shall dismiss teachers only for good cause shown, which shall be

recorded by the clerk, and teacher shall have the right of appeal to county superintendent and thence to State superintendent.

Institutes.—The State superintendent shall cause to be held once a year a State teachers' association, at such time and place as in his judgment will best promote the general interests of education. Each county superintendent shall hold a teachers' institute not less than three days each year for the instruction of teachers and those desiring to teach; may revoke the certificate, reduce the grade, or refuse to grant a certificate to any teacher refusing to attend same without cause; shall give each teacher a certificate showing what sessions he attended, by virtue of which certificate teacher shall be entitled to pay for not more than three days during which his school was closed that he might attend institute. (See also Certificates, county.)

Training.—(See Schools, normal.)

3. SCHOOLS.

Scholastic day and month—Attendance—Employment of children—Transportation of pupils—Courses of study—Text-books—Buildings and grounds—Kindergartens—High schools—Manual training—Normal schools.

Scholastic day and month.—School shall commence at 9 a. m. and close at 4 p. m., with one hour for recreation at noon, but the school board may order a less number of school hours. Twenty school days make a school month.

Attendance.—Schools are free to all within the district under 21 and over 6 years of age or over 4 where there are kindergartens. Attendance shall be compulsory upon those under 14 during the whole of the school term in the city or town where they reside, unless they be prevented by bodily or mental disability, or unless taught in a private school or at home in similar branches, or have already acquired knowledge of the branches in question; and attendance shall be compulsory upon anyone under 15 who is not employed in any lawful work. Deaf-mutes between 8 and 16 are required to attend a suitable institution six months each year for five years. School boards may require vaccination of pupils as a condition precedent to attendance and shall decide how far revaccination shall be required if a case of smallpox has occurred in the vicinity, and may prohibit the attendance of any teacher or pupil for such time as they may determine to prevent the spread of contagious disease.

Employment of children.—No child under 14 shall be employed in any factory, store, workshop, in or about any mine, or in the telegraph, telephone, or public messenger service; nor in any work whatever for compensation during school hours. No child under 16 shall be employed at any work before 6 a. m. nor after 7 p. m., nor longer than ten hours in any day, nor more than six days in any week, and every such child under 16 shall be entitled to not less than thirty minutes for mealtime at noon. No person shall employ, while a school is maintained in the town or city, any minor under 16 who can not read at sight and write legibly simple English sentences, and no parent, guardian, or custodian shall permit any such minor under his control to be so employed. Any parent or guardian violating the provisions of this law shall be liable to a fine of from \$5 to \$25, and any person or corporation who as employer shall violate the same shall be liable to a fine of from \$10 to \$25 for the first offense, \$25 to \$50 for the second, and for the third and each succeeding offense shall be liable to imprisonment from ten to thirty days. The board of inspectors of child labor in the State of Oregon shall consist of five persons, at least three of whom shall be women, appointed by the governor, one member to retire each year. It shall be unlawful for anyone to employ a child under 16 without first securing from parent or guardian an affidavit stating name, date and place of birth, and the school attended by such child. Employers shall keep a register containing such data, and the said affidavits shall, upon demand, be shown to the said board of inspection. If any such child may seem physically unable to perform the labor at which he is employed, said inspectors may demand a certificate of physical fitness from some regularly licensed physician, in default of which he shall not be so employed.

Transportation of pupils.—When authorized by a majority vote at any legally called school meeting, the school board shall furnish transportation to and from school for all pupils living more than 2 miles therefrom, and may at their discretion provide for transportation of pupils living nearer than 2 miles, or, instead, may pay the board of any pupil at a suitable place near the school. When authorized by the school meeting, the said board may suspend the district

school and arrange with other districts for the instruction of pupils residing within their district, and may arrange for the transportation of such pupils to and from, or for their board at a suitable place near, such schools. Transportation or board herein referred to may be paid for out of the common school fund, or, when so authorized by the school meeting, a tax may be levied for such purpose.

Courses of study.—In first-class districts the course of study is prescribed by the district school board, who may include therein one modern language upon petition of 100 qualified electors of the district. Districts of the second and third class shall use the course prescribed by the State board of education. In every school shall be given suitable instruction in physiology and hygiene, with special reference to the effects of alcoholic drinks and narcotics. (For other branches of study specified by law see Teachers—Certificates. See also High schools.)

Text-books.—In January every four years^a the governor shall appoint, from different sections of the State, a board of five text-book commissioners, who shall meet at the State capitol the second Monday in July every six years^a (and other times at the call of the chairman or the governor), continue in session not more than fifteen days, and adopt text-books covering all branches specified in the courses of study prepared by the State board of education, which books shall be used in the public schools of the State for six years. Four members shall constitute a quorum; at least three votes shall be necessary for the choice of any text-book; sessions shall be public, all votes viva voce, and the vote of each member shall be recorded in the board minutes. Commissioners shall receive \$100 for attendance at each meeting, with 10 cents for each mile traveled going and coming.

In February every six years^a the State superintendent shall mail circulars to all the leading text-book publishers containing data necessary to the submittal of bids. When text-books have been adopted by said commissioners, they shall report the same, giving title of each book, date of copyright, and prices (exchange, introductory, and retail) to the State board of education, who shall execute a contract in triplicate, requiring each publisher whose book or books shall have been adopted to maintain at least one depository in each county (at places designated by State board of education), where books shall be sold or exchanged at prices named in bids, and contracts shall be secured by bond in such sum and with two such sureties as may be approved by said State board of education.

In August every six years^a the State superintendent shall issue a circular giving data concerning books adopted by said text-book board, and send same to each county superintendent in sufficient quantities that every school officer shall have a copy.

In any district where a high school is maintained, the board of school directors shall, in July every six years,^a adopt text-books for any branch of study added by them to the branches specified in the State high school course, but no book shall be substituted, directly or indirectly, for one specified in said State course. The same provisions regarding voting, contracts, etc., specified in connection with the State board apply similarly to said district boards.

Buildings and grounds.—Whenever in the judgment of the district school board it is desirable or necessary, or whenever petitioned so to do by one-third of the voters of the district, said board shall call a meeting of the district to vote upon the question of the selection, purchase, exchange, or sale of a schoolhouse site, or the erection, removal, or sale of a schoolhouse. If a majority of the voters present at such meeting shall select a site, or shall be in favor of the purchase, exchange, or sale of the schoolhouse, as the case may be, the board shall take action accordingly; but it shall require a concurrence of two-thirds of those present and voting at such meeting to order the removal of a schoolhouse, and such house so removed can not again be removed within three years.

It shall be the duty of the school board to clear the school grounds of brush or other obstructions to a good view of the premises; provide suitable and convenient water-closets, at least two for each school, and keep same in a clean and wholesome condition; and failure to comply with these provisions shall be sufficient ground for removal from office and for withholding from such district any part of the county school-tax fund, and the said board have power, without a vote of the district, to levy a tax to cover any expense incurred for such purposes.

^a Beginning 1901.

The board shall prosecute any person who shall willfully write, make marks, or draw obscene pictures on any schoolhouse or outbuilding, or otherwise deface or damage any school building or furniture; and such offense shall be punished by a fine of from \$5 to \$20. When authorized by the district the board may permit a schoolhouse, when not occupied for school purposes, to be used under careful restrictions for any other proper purpose, giving equal privileges to all religious denominations or political parties, provided that stationary furniture shall not be moved, nor shall the district be put to any expense for fuel or otherwise because of such use. No dancing shall be permitted in any schoolroom.

In order that the children may assist in adorning the school grounds with trees, and to encourage the planting and protection of trees and shrubs and the preservation of forests, the afternoon of the second Friday in April each year shall be observed as Arbor Day, for which the State superintendent shall prepare and prescribe a course of exercises and instruction.

Kindergartens.—School boards of first or second class districts, when authorized by such districts, may establish and maintain kindergartens as part of the common school system, which shall be free to children over 4 years of age.

High schools.—There are two kinds of high schools—district high schools and county high schools. Upon petition of one-third of the voters of any district, or whenever the school board think proper, the question shall be submitted to the voters of the district whether a high school shall be established and at the place specified; and if a majority of all votes cast shall be in favor of same, it shall be the duty of said board to establish such high school, provide for its maintenance, and select suitable teachers for its various grades. The board may use any part of the county or State school funds, or any funds raised by taxation of the district, for such purpose: *Provided*, That none of the funds of any district shall be so used unless said district shall also maintain at least eight months' instruction each year in the lower grades. High schools shall be free to all pupils who shall have passed the eighth-grade final examination.

The county court, upon petition of 100 or more qualified electors, taxpayers of the county, must submit the question, at a general or special election, of establishing a county high school; and if said vote shall be affirmative, the court shall within thirty days locate such school in some suitable and convenient place in the county. When said court shall have provided a lot and building, they shall cause same to be deeded to the county high school board, which shall consist of the county judge, the two commissioners, treasurer, and superintendent. Said court or board may rent suitable rooms for said school, or said board may contract with the board of directors of any school district in the county which may maintain a high school grade to teach all county high school pupils at such charge for tuition as may be agreed upon. The county court shall levy a tax to cover cost of establishment and maintenance of said high school or to pay said tuition. More than one high school may be established by the high school board if so ordered by the voters.

The course of study for high schools shall embrace four years, two of which shall be given to required work; it shall be uniform throughout the State, the course being prescribed by the State superintendent. The course of study for the two years of optional work shall be prescribed by the board controlling the district or county high school, after consultation with the State superintendent; all or part of such two years may be devoted to industrial training. Where industrial training is made a part of the course, it may be interspersed with the required studies throughout the four-year course.

All teachers in high schools shall be graduates of one of the State normal schools, or of some institution of collegiate or university grade, or shall hold a State certificate or diploma.

Manual training.—(See High schools.)

Normal schools.—The following-named are designated as State normal schools: The Oregon Normal School, at Monmouth, Polk County; the Southern Oregon State Normal School, at Ashland, Jackson County; the Eastern Normal School, at Weston, Umatilla County; the Wasco Independent Academy, at The Dalles, Wasco County; and the Central Oregon Normal School, at Drain, Douglas County. The schools at Monmouth, Ashland, and Drain are each under the control of a board of twelve regents, consisting of the State board of education ex officio and nine members appointed by the governor for six years. The school at Weston is under the control of seven regents appointed by the governor for six years, and that at The Dalles is controlled by a board of trustees. Boards arrange courses of study in conjunction with State superintendent.

ent, and confer diplomas upon persons recommended for graduation by the faculty. (See also Teachers—State certificates and diplomas.) In connection with normal schools may be established model schools for practice in teaching, and all students may have the privilege of training in the same.

4. FINANCES.

Common school fund—County tax—District tax—Apportionment and disbursement—Bonds.

Common school fund.—The proceeds of all the lands which have been or hereafter may be granted to this State for educational purposes (excepting the lands heretofore granted to aid in the establishment of a university); all the moneys and clear proceeds of all property which may accrue to the State by escheat or forfeiture; all moneys which may be paid as exemption from military duty; all the proceeds of all gifts, devises, and bequests made by any person to the State for common school purposes; the proceeds of all property granted to the State when the purposes of such grant shall not be stated; all the proceeds of the 500,000 acres of land to which the State is entitled by the provisions of an act of Congress entitled "An act to appropriate the proceeds of the sales of the public lands, and to grant preemption rights," approved September 4, 1841; and also the 5 per cent of the net proceeds of the sales of the public lands to which this State shall become entitled on her admission into the Union (if Congress shall consent to such appropriation of the grants last mentioned) shall be set apart as a separate and irreducible fund, to be called the common school fund, the interest of which, together with all revenues derived from the school land mentioned in this section, shall be exclusively applied to the support and maintenance of common schools in each school district, and the purchase of suitable libraries and apparatus therefor. * * * The governor, secretary of state, and State treasurer shall constitute a board of commissioners for the sale of school and university lands and for the investment of funds arising therefrom. [State constitution.] (See also Bonds.)

County school tax.—The county courts of the several counties are required to levy, at the same time they levy other taxes, a tax upon all taxable property in their respective counties for school purposes, which shall aggregate not less than \$6 per capita for the children in each county from 4 to 20 years of age, as shown by the last preceding school census.

Fines collected for violations of school law shall be applied to the support of the common schools.

District school tax.—District meetings shall have power to levy a tax upon all real and personal property in their district, not to exceed 5 per cent of the taxable values of the district, and make any necessary appropriation for the support and benefit of schools; but no tax shall be levied at any special meeting unless the call for such meeting stated such purpose.

Apportionment and disbursement.—The county superintendent shall, on the first Monday in October, and at such other times as he may deem advisable, make an apportionment of the entire school fund then in the county treasury.

The county tax fund shall be apportioned in the following manner: In October he shall apportion \$50 to each district that has reported to him as required by law (see Organization—District school clerks) and \$5 for each teacher employed by such district who during the year preceding attended a county institute or State teachers' association not less than sixteen hours. The remainder of such fund (and any amount to be apportioned at any time other than in October) shall be apportioned according to the number of children resident in each district between the ages of 4 and 20 years as shown by the clerk's last annual report.

On the first Monday in October annually he shall apportion the common or irreducible school fund among the several districts according to population between the ages of 4 and 20 years.

Districts shall not be entitled to their proportion of the school fund unless they shall report to the county superintendent by the second Monday in July each year and shall have had a school taught in their district at least three months. Every member of a school board or district clerk who shall willfully sign a false report with the intent of causing the county superintendent to apportion a larger share than the district's just proportion of school money shall be deemed guilty of a misdemeanor and such district shall also forfeit for each such offense the sum of \$25 of its proportion of the school fund. In all districts at

least 85 per cent of the amount received from the county and the irreducible school fund shall be applied on teachers' salaries. (See also Organization—District boards, regarding fuel, furniture, etc.)

Bonds.—Upon petition of 10 voters of any school district the school board shall order an election, giving twenty days' notice, to determine whether a bonded debt shall be incurred. If a majority of the votes cast shall be favorable thereto, the board shall issue coupon bonds of the district, interest not to exceed legal rate, payable semiannually, such bonds redeemable at the pleasure of the district after ten years but due and payable twenty years from date. In no case shall the aggregate bonded debt exceed 5 per cent of the taxable values of the school district. The county treasurer shall sell such bonds at the best price obtainable, not less than par, and hold the proceeds subject to the order of the said district board. But before offering for sale notice of such issue shall be given the State land board (see Common school fund), who shall have the preferential right to purchase same, and any surplus of the irreducible school fund or any other fund held by said State land board shall be invested as far as possible in the bonds and warrants issued by the various school districts within the State.

The directors of such district must levy annually a tax sufficient to pay the interest accruing on said bonds as it becomes due, and after ten years shall also levy an amount not less than one-tenth of such unpaid bonds for a sinking fund to meet the payment of such bonds at maturity.

PENNSYLVANIA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent and deputy—County superintendent—Directors and controllers—Local superintendents.

State superintendent.—A superintendent of public instruction shall be appointed by the governor every fourth year, by and with the advice and consent of two-thirds of all the senate, and shall be removed by the governor for misbehavior. He shall decide without appeal or costs all controversies or disputes that may arise or exist among the directors or controllers of any district, or between collectors or treasurers; give advice, explanations, construction, or information to the district officers and citizens relative to the common school law, the duties of common school officers, the rights and duties of parents, guardians, and pupils, and the management of the schools, and all other questions calculated to promote the cause of education; sign orders on the State treasurer for payment of State money to the school districts; prepare blank forms for the annual district reports, with suitable instructions, and forward them; prepare an annual report containing a full account of the condition of the public schools, the expenditures for them, estimates for the year ensuing, the number of pupils, the cost of teaching each, the number of districts, plans for the improvement of the system, and all such matters relating to the common schools and to the duties of his office as he may deem expedient to communicate; provide a seal for the authentication of official documents. He shall appoint one of his clerks general deputy, who may perform all his duties in his absence, and remove any county superintendent for neglect of duty.

County superintendents.—The school directors of the several districts in each county shall meet in convention at the county seat every three years and select one person of literary and scientific attainments (college diploma, State or local certificate), and of three years' experience in the art of teaching, and of good moral character, as county superintendent for three succeeding school years. His salary shall be \$10 for each of the first 100 schools within his jurisdiction, \$5 for each school above 100 and not over 200, and \$2 each for each school above 200, but in no case to be less than \$1,000 nor more than \$2,000. School directors may increase the county superintendent's salary from the school fund of the county, and in counties having over 290 schools or 1,200 square miles of territory or a school term exceeding seven and one-half months the salary paid shall not be less than \$1,500. The county superintendent may not teach in the public schools unless he does so without compensation. He shall take oath to perform his duties to the best of his ability; visit as often as practicable the several schools of his county, noting the character of instruction and the

methods, and giving directions upon these subjects in order to bring the teaching up to the grade intended and the grades into ordination and the schools into uniformity; see that the branches required by law are taught by legally competent teachers, examine all candidates for teaching, grant certificates to qualified persons and revoke the same for cause; annually report to the State superintendent in extenso upon the educational condition of his county, forward the reports of the several school districts thereof, and hold teachers' institutes annually.

Directors and controllers.—Every township, borough, and city of this Commonwealth, or which shall hereafter be erected, shall be a school district. School districts which are composed of cities and boroughs divided into wards for school purposes shall be constituted as follows: Each ward shall retain its school property and elect a separate board of directors, who shall have the erection and repair of schoolhouses, the purchase of sites, and the levying, assessing, collecting, and disbursing of all taxes laid for the above purposes; but other powers and duties which are exercised by district school directors shall be in the hands of a board of controllers, composed of the directors of the several wards; provided that whenever the ward boards of directors shall voluntarily grant the property of their wards to the board of controllers the city or borough shall constitute a single school district, but the number of directors shall thereafter be three for each ward.

School directors shall be elected annually in other districts as follows: At the same time and place that elections are held for supervisors in wards, cities, or boroughs, two qualified citizens shall be elected school directors in each district, whose term of office shall be three years, vacancies to be filled by the board. No school director may be also a constable, pathmaster, commissioner of roads, or auditor. Failure on the part of a member to attend two consecutive meetings and the failure of all the members of the board of directors or controllers to levy a tax to keep the schools in operation or to provide schoolhouses, vacates the delinquent member's seat in the first case, and vacates the seats of every member in the second. The board elects a president, secretary, and treasurer, and holds a meeting at least once in every three months.

Directors of a township, or of two or more townships jointly, may establish high schools, which, maintaining the course prescribed by the State superintendent, shall be entitled to an appropriation from the State of \$400 for a two-years' course beyond the common branches, \$600 for a three-years' course, and \$800 for a four-years' course,

The district board of directors and the municipal board of controllers have the following duties and powers: To establish a sufficient number of schools, employ teachers, direct what branches shall be taught and books used, expel all incorrigible children, purchase and issue text-books, and other necessary supplies, and report the amount expended for such supplies, grade the schools, pay expenses of the schools by drafts on the district treasurer, and report and publish annually a statement of the financial operations of the district in not less than ten written or printed handbills posted in the most public places of the district, and also to make a statement to the auditor.

The board of controllers of school districts which are composed of cities or boroughs divided into wards for school purposes, or boroughs not so divided, but having a population of 5,000 or more, shall possess the following additional powers and have the following duties: They may establish high schools, and shall admit to them all under 21 years of age properly prepared to enter upon the course of study, and, in general, shall exercise supervision over them, appointing the teachers and establishing the course of study, purchasing land and erecting buildings, and maintaining them for not less than ten months in the year.

Cities of under 100,000 inhabitants are constituted one school district, each ward to elect two members of the board of controllers for four-year terms; one going out biennially.

The county superintendent shall annually call all the directors together, at some time when the county teachers' institute is not in session, for the consideration of questions pertaining to school administration. Each director attending receives 3 cents per mile for traveling expenses, and to defray the expenses of the convention the county pays a dollar for each director in attendance, the maximum amount being \$100.

City, borough, and township superintendents.—School directors in any city, borough or township having a population of over 5,000 may elect one person of literary and scientific acquirements, and skill and experience in the art of teaching, as city or borough superintendent for the three succeeding school

years; and they shall determine his compensation. After the certification of the election of the superintendent to the State superintendent, the schools of the city, borough, or township shall not be subject to the authority of the county superintendent. The municipal superintendent is to perform the duties of the county superintendent and such as may be imposed by his board of directors, report monthly to the State superintendent, and attend meetings of superintendents called by him.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—No district employing a teacher who has not a valid certificate from the county or local superintendent shall receive money from the State treasury. No teacher shall be employed in teaching any branch of learning other than those enumerated in his or her certificate. No teacher shall be employed or dismissed except by a majority vote of the whole number of the directors or controllers of any common-school district. No person shall receive a certificate from a county, city, borough, or township superintendent who has not a fair knowledge of orthography, reading, writing, geography, English grammar, mental and written arithmetic, history of the United States, the theory of teaching, physiology and hygiene, civil government and elementary algebra. No person using intoxicating drinks as a beverage shall be granted a certificate. The certificate shall state the proficiency of the holder in each branch. The teacher must report monthly to the local school board the number and sex of pupils in attendance, the books used, and branches taught, or forfeit pay. After June 1, 1904, the minimum salary of teachers shall be \$35 a month. Any district failing to comply with this provision shall forfeit its State appropriation during the whole time it is violated.

Preliminary training.—The State is divided at present into 13 normal school districts. When 13 or more citizens shall, as contributors or stockholders, erect and establish a school for the professional training of young men and women as teachers for the public schools of the State, all students in that school over 17 years of age who sign an agreement to teach two years in the public schools of the State after graduation receive \$1.50 per week, which pays their tuition in full. The affairs of each school are to be managed by a board of 18 trustees, 12 elected by the contributors and 6 appointed by the State superintendent, and it shall require a three-fourths vote to pass a motion for the sale or purchase of real estate. The governor, superintendent, and attorney-general are a commission to distribute the State money to the schools. The trustees report annually to the superintendent, and are always subject to his inspection. To obtain State aid the following requirements must be met: Suitable building, surrounded by an area of 10 acres; a hall to seat 1,000 persons, with class rooms, etc., to accommodate 300 or more students, properly supplied with heating apparatus, adequately lighted and ventilated, and provided with a place for physical exercise in inclement weather, a library, 6 professors or more, one each in orthography, in reading and elocution, in writing, drawing and bookkeeping, in arithmetic and higher mathematics, in geography and history, in grammar and English history, and in theory and practice of teaching, together with such professors of natural, mental, and moral sciences, languages, and literature as the condition of the school and the number of students may require. The principal shall be a professor of one of the required branches. There shall be a model school of not less than 100 children. The principals shall fix the requisites for admission and the course and duration of study. The examination of the graduating class shall be conducted by a board composed of two principals, one of whom shall be the principal of the school whose pupils are under examination, the State superintendent or his deputy and two county or local superintendents of the normal school district being present, and no person shall graduate unless by a vote of 4 out of the said 5-members. Graduates are given a certificate of their scholastic qualifications valid throughout the State, but after two years of teaching a certificate of competency in teaching (teachers' State certificate) shall be given. Actual teachers in good standing, having taught three full annual terms, may also take the examination.

Institutes.—Annually the county superintendent shall hold an institute, at which all the teachers of the county are required to be present, without loss of pay. The duration of the institute is five days, one-half day being allowed to come from and another to return home. The county superintendent shall draw from the county treasury for every three days' attendance of a teacher the sum

of \$1 to defray the expenses of lecturers and instructors. It shall be lawful, however, for the board of directors or controllers which has elected a superintendent and employs not less than 75 teachers to hold a separate annual teachers' institute and to draw upon the county treasury in the manner laid down for the county superintendent.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—The board of directors or controllers shall provide a sufficient number of schools for the education of every individual above 6 and under 21 years of age for four to ten months, without regard to race or color.

All children between 8 and 13 years of age must attend school continuously during the term, unless the board at its meeting in June shall reduce the period of compulsory attendance, but the period shall not be reduced to less than 70 per cent of the term. Pupils may be excused on account of mental or physical ailments, or if there is no schoolhouse within 2 miles of their residence, or on presentation of a certificate that they are being taught in a proper private school. For neglect of anyone in parental relation to send a child to school, or of the principal or teacher to report the nonattendance of pupils, the penalty for the first offense is \$2, each subsequent offense \$5. Boards of directors or school controllers in cities shall, and in all other districts may, appoint a truant officer, with police power, to be paid out of the school fund, to enforce the compulsory-attendance law. Boards of directors may establish special schools for habitual truants or those who are insubordinate or disorderly while in attendance upon the public schools.

No child under 13 years of age shall be employed in any manufacturing or mercantile industry; nor anyone under 16 who can not read and write English, unless he presents a certificate of having attended during the preceding year an evening or day school for a period of sixteen weeks, such certificate to be signed by the teacher of the school so attended.

Character of instruction.—It shall be the duty of each county superintendent to see that there be taught orthography, reading, writing, English grammar, geography, arithmetic, and physiology in reference to stimulants, as well as such other branches as the board of directors or controllers may require, all to be taught by qualified teachers. Failure of a local board in these respects works forfeiture of State money. District boards have power to grade schools, and boards in cities and boroughs having a population of 5,000 or more may establish a high school, fix its course of study, appoint its teachers, and maintain it for ten months in the year.

Upon the application of the parents of 20 or more children above 6 years of age, the school board shall open an evening school, giving instruction in reading, writing, arithmetic, and such other studies as may be prescribed by the board. The term of such school is to be not less than four months of 20 evenings of two hours each, but if the average attendance falls below 15 the school may be closed. In certain cities central boards of education are provided, to establish and maintain schools for instruction in the mechanic arts and kindred subjects; instruction in such schools may be given in the day or evening, and may include chemistry, mathematics, natural philosophy, and other branches pertaining to the mechanic arts.

Text-books.—No series of text-books shall be adopted in any school district unless by vote of a majority of the whole number of the directors or controllers, and their votes shall be recorded by name; nor shall any text-books be changed until three years after their adoption. The board shall purchase text-books and other necessary supplies for the schools as the occasion demands, and such books and supplies shall be furnished free of cost to the pupils, subject to regulations.

Buildings.—Suitable buildings and outhouses must be supplied by the board of directors for all children of school age.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—Any person found intoxicated in a public thoroughfare or place shall be fined \$2, to be paid to the school district. This fund is distributed to the districts on the basis of resident taxables.

Taxation.—There are three kinds of tax for school purposes according to their subjects, each separate and distinct, but all may be due from one person. They are: The rate tax on real and personal property; a minimum occupation tax of \$1 on all resident males' taxables over 21 years of age; the districts may tax themselves for support of schools in general, up to 13 mills, and may raise a sum for establishing schoolhouses not greater than the sum raised for support of schools in the same year.

RHODE ISLAND.

1. ORGANIZATION OF THE SYSTEM.

State board—Commissioner of public schools—Town school committee—Town superintendent—District trustees—Truant officers.

State board.—The general supervision and control of the public schools of the State and the enforcement of all rules and regulations necessary for carrying into effect the laws in relation thereto, with such high schools, normal schools, and normal institutes as are or may be established and maintained wholly or in part by the State, shall be vested in a State board of education, which shall consist of the governor and lieutenant-governor ex officio, and of six other members, one from each of the counties of the State with the exception of Providence County, which shall have two members. Two members of the board shall be elected annually at the January session of the general assembly from each county the term of whose member has expired, who shall hold office three years. Vacancies are filled in the same manner. The governor shall be president and the commissioner of public schools secretary of the board, which shall hold quarterly meetings, but special meetings may be convoked by its president or secretary. The board may grant for the purchase of books in any free public library the sum of \$50 for the first 500 volumes it obtains, and \$25 for every additional 500 volumes therein, provided that the annual payment shall not exceed the sum of \$500. It shall prescribe the character of books which constitute such library and regulate its management so as to secure the free use of the same to the people of the town and neighborhood.

The board shall hold or cause to be held, in such places in different parts of the State and at such times as they may determine, examinations for the position of teacher in the public schools of this State; and said board is hereby authorized to issue certificates of qualification which shall be valid throughout the State for the grade and time specified therein.

The board shall make an annual report to the general assembly. The members shall receive no compensation, but the expenses necessitated by the performance of their duties shall be paid after approval by the general assembly.

Commissioner of public schools.—The State board shall annually elect a commissioner of public schools, who shall devote his time exclusively to the duties of his office, and while unable to perform them, the governor shall appoint a person to act as commissioner during the continuance of the disability. He may appoint a clerk to assist in the duties of his office.

He shall visit, as often as practicable, every school district in the State for the purpose of inspecting schools and of diffusing as widely as possible by public addresses and personal communication to school officers, teachers, and parents a knowledge of the defects and of any advisable improvements in the administration of the system and the government and instruction of the schools. He shall endeavor to secure uniformity in text-books and promote the establishment of school libraries, and shall report annually to the board of education upon the condition of education in the State schools, with suggestions for their improvement.

Town school committee.—The school committee of each town shall consist of three residents of the town, or of the same number as constituted the committee in 1896, divided as nearly as may be into three groups, one group retiring from office annually. In a town abolishing all the school districts within its limits, the town school committee may, by vote of the town, be increased to seven persons. Vacancies are filled by the town council until the next annual election. The school committee shall meet at least four times in every year.

The committee may alter and discontinue districts, shall locate all school-

houses; one or more of its number shall visit every public school in the town at least twice during each term, once within two weeks of its opening and once within two weeks of its close, examining the register, schoolhouse, library, studies, books, discipline, modes of teaching and of improving the school. They shall make rules and regulations for the attendance and classification of the pupils, for the introduction and use of text-books and works of reference, and for the instruction, government, and discipline of the public schools, and shall prescribe the studies to be pursued therein, under the direction of the commissioner of public schools, and they may suspend incorrigible children. They may consolidate two or more ungraded schools in order to make a graded school of two or more departments, and they may unite an ungraded school with a graded school. A bonus of \$100 is granted for each department of a graded school formed as above, and the same sum is granted for each ungraded school united with a graded school. Authority to provide transportation of pupils in such cases is granted. No town's proportion of the annual State appropriation of \$120,000 shall be reduced on account of any such consolidation.

Where a town is not divided into districts,^a or shall vote to provide schools without reference to such division, the school committee shall manage and regulate such schools and draw orders for the payment of their expenses. Whenever the public schools are maintained by district organization, the committee shall apportion among the districts the town's proportion of the sum of \$120,000 received from the State, and in addition at least one-fourth as much more from the town appropriation for the support of public schools; the remainder of the town appropriation and the moneys received from registry and dog taxes, from school funds, and other sources, shall be divided into two equal parts, one to be apportioned to the several districts according to the average attendance at the schools during the preceding year, the other to be apportioned at the discretion of the committee: *Provided always*, That the total apportionment shall not be less than \$180, and the district shall have reported in legal manner and form that one or more schools have been taught by a competent teacher in an approved building, that the "teachers' money" of the preceding year has been wholly used in paying teachers, and that the register has been properly kept and deposited. The committee shall make a report annually to the State commissioner and may reserve not more than \$40 to defray the expenses of printing it.

Superintendent of schools.—The school committee of each town shall elect a superintendent of the public schools of the town, to perform such duties and to exercise such powers as the committee shall assign him, and to receive such compensation as the committee may vote.

Any two or more towns the aggregate number of schools in all of which shall not be more than 60, may, by vote of the qualified electors of said several towns, unite for the purpose of the employment of a superintendent of schools.

District school trustees.—Each district^a shall annually elect a moderator, a clerk, a treasurer, a collector, and either one or three trustees. The trustees shall provide and have the custody of the schoolhouse and other property and shall employ one or more qualified teachers for every 50 scholars in average daily attendance; shall see that the pupils are supplied with books, and shall provide the same at the expense of the district on failure of parent or guardian to furnish them. Whatever compensation is received by the trustees must be paid by tax levied on the district, and may not be taken out of State or town appropriations.

Truant officers.—The school committee of each city or town shall annually appoint and fix the compensation of one or more persons as truant officers, who shall be clothed with the power of special constables, and who shall, under the direction of the school committee, inquire into all cases arising under the provisions of the compulsory-attendance act, and shall alone be authorized, in case of violation of any of the provisions of said act, to make complaint therefor; they shall also serve all legal processes issued in pursuance of said act, but shall not be entitled to receive any fees for such service: *Provided, however*, That in case of the commitment of any person under the provisions of any section of said act, or for default of payment of any fine and costs imposed thereunder, such officer shall be entitled to the regular fees allowed by law for similar service. (See also Schools—Attendance.)

^aAll districts abolished January 1, 1904.

2. TEACHERS.

Qualifications and duties—Preliminary training—Institutes.

Appointment and qualifications.—No person shall be employed to teach as principal or assistant in any school supported wholly or in part by public money unless such person shall have a certificate of qualification issued by or under the authority of the State board of education. No school committeeman or trustee may teach in the schools of his own town. The teacher must be of good moral character and aim to implant in the minds of children committed to his care the principles of morality and virtue. He shall keep a register of the scholars, their names, sex, names of parents or guardians, time of entry and withdrawal, daily attendance, and note by date the visits of a school officer. He shall also prepare the return of the district to the school committee of the town.

Preliminary training.—The normal school shall be under the management of the board of education and commissioner of public schools as a board of trustees. Tuition is free to State pupils having passed the required examination and given satisfactory assurances of their intention to teach in the State public schools at least one year after leaving the school. Graduates in the regular course shall, on recommendation of the principal, receive a diploma. Pupils having attended regularly one term, but living more than 5 miles distant from the school, may be allowed a sum not exceeding \$25 for each quarter year for traveling expenses. The fund for such purpose, however, shall be limited to \$4,000.

Institutes.—A sum not exceeding \$500 shall be annually allowed to defray the necessary expenses and charges for teachers and lecturers and for teachers' institutes; and a sum not exceeding \$300 shall be annually allowed, under the direction of the board of education, for publishing and distributing among the several towns educational publications, providing lectures on educational topics, and otherwise promoting the interests of education in the State.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Schools must be taught for at least six months by a qualified teacher in an approved schoolhouse.

Every child from 7 to 15 years of age, unless he has completed in the public schools the elementary studies taught in the first eight years of school attendance exclusive of kindergarten instruction provided for in the course of study adopted by the school committee of the city or town wherein such child resides, or unless he shall have reached 13 years of age and shall be lawfully employed at labor or at service or engaged in business, shall regularly attend some public day school during all the days and hours that the public schools are in session in the city, town, or district wherein he resides; and every person having under his control a child as above described shall cause such child to attend school as required above, and for every neglect of such duty the person having control of such child shall be fined not exceeding \$20: *Provided*, That if the person so charged shall prove that the child has attended for the required period of time an approved private day school or that the physical or mental condition of the child was such as to render his attendance at school inexpedient or impracticable, or that the child is over 12 years of age and has been excused in order to be employed by authority of the school committee upon the written recommendation of the truant officers and of the overseer of the poor, stating that the child's wages are necessary for the support of the family, or that the child was destitute of clothing suitable for attending school and that the person having control of said child was unable to provide suitable clothing, then such attendance shall not be obligatory, nor shall such penalty be incurred. For these purposes the school committee shall approve a private school only when they are satisfied that the period of attendance of the pupils in such school is substantially equal to that required by law of a child attending a public school in the same city or town; that the teaching in such school in all studies except foreign languages and any studies not taught in the public schools is in the English language; that such teaching or instruction is thorough and efficient; and that registers are kept and returns to the school committee and truant officers in relation to the attendance of pupils are made the same as by the public schools.

No child under 13 years of age shall be employed to labor or engage in business, except during the vacations of the public schools of the city or town wherein such child resides, or as provided for above. No one under 15 years of age shall be employed unless he shall present to his employer a certificate made by or under the direction of the school committee of the city or town wherein such child resides, stating the name, place, and date of birth of said child and the name and residence of the person having control of said child. Every person who shall employ any minor child above described who has not complied with the provisions above recited shall for every such offense be fined not exceeding \$20.

The truant officers may visit any places or establishments where such minor children as have been described are employed to ascertain whether the provisions of this law are duly complied with, and may, as often as twice in every year, demand from all employers of such children a report containing the names of all children under 14 that are employed by them, such report to give the names, ages, and residences of all such children; and for any refusal to make such reports as are above provided for, or for any refusal to produce the above-mentioned certificates, any employer of such children shall be fined not exceeding \$10.

Every habitual truant—that is, every child who is required under this law to attend school and who willfully and habitually absents himself therefrom—and every habitual school offender—that is, every child who is required to attend school, but who persistently violates the rules and regulations of the school which he attends or otherwise persistently misbehaves therein, so as to render himself a fit subject for exclusion therefrom, may be complained of by the truant officer and be committed to the Sockanosset School for Boys or to the Oaklawn School for Girls for a period not exceeding his minority: *Provided*, That any court or magistrate by whom a child has been convicted of such offense may, in his discretion, defer sentence and place such child on probation in the custody and control of a truant or probation officer of the city or town wherein such child resides for such period of time and upon such conditions as said court or magistrate may deem best, and whenever within such period the child violates the conditions of his probation he shall be brought into court and said court or magistrate may, in his discretion, place such child on further probation in the custody and control of the State board of charities and corrections for such period of time and upon such conditions as said court or magistrate may deem best; and whenever within such period the child violates the condition of his further probation, he shall be brought into court and receive sentence for the offense of which he was convicted when he was placed on probation, but the child may at any time demand that sentence be passed upon him, and the court or magistrate, whenever convinced that the child has reformed, may discontinue the complaint without sentence.

Character of instruction.—The school committee shall prescribe the studies to be pursued in the public schools, and shall include instruction in the injurious effects of stimulants and narcotics upon the human system. Evening schools may be maintained by the towns under the general supervision of the State board.

Any town maintaining a high school having a course of study approved by the State board of education shall be entitled to receive annually from the State \$20 for each pupil in average attendance for the first 25 pupils and \$10 each for the second 25. Any town not maintaining a high school which shall make provision for the free attendance of its children at some approved high school shall receive aid upon the same basis as above.

Text-books.—The school committee of every city and town shall purchase, at the expense of such city or town, text-books and other school supplies used in the public schools, and said text-books and supplies shall be loaned to the pupils free of charge, subject to rules and regulations prescribed by the committee.

A change may be made in the schoolbooks in the public schools of any town by a vote of two-thirds of the whole committee, provided that no change be made in any text-book in a town oftener than once in three years, unless by the consent of the State board of education.

The sum of \$4,000 shall be annually appropriated for the purchase of dictionaries, encyclopedias, and other works of reference, maps, globes, and other apparatus, to be distributed to towns or districts making an appropriation for the same purpose, each town to receive not more than \$200 if not divided into districts, districts to receive not more than \$20, provided they have raised at least an equal sum.

Buildings.—All schoolhouses shall be located by the town school committee and plans approved by them. No one shall maintain a nuisance, as swine in a pen, within 100 feet of the inclosure of a schoolhouse.

4. FINANCES.

Permanent school funds—Taxation.

Permanent school fund.—The general treasurer, with the advice of the governor, shall have power to regulate the custody and safe-keeping of the fund for the support of public schools, and shall keep the same securely invested in the capital of some safe and responsible bank or banks or in bonds of towns or cities within this State. The money that shall be paid into the State treasury by auctioneers for duties accruing to the use of the State is appropriated annually to the permanent increase of the school fund. All money for the support of public schools appropriated to towns and by them forfeited shall be added to the permanent fund. All fines under the compulsory-attendance law and all poll taxes shall be applied to the support of the public schools in the town or city where collected, and all dog taxes, after the payment of damages done by dogs, shall be applied in a similar way unless retained by vote of the town.

Taxation.—The sum of \$120,000, to be denominated "teachers' money," shall be annually paid, out of the income of the permanent school fund and from other money in the treasury, for the support of the public schools, to be apportioned among the several towns by the commissioner of public schools as follows: The sum of \$100 shall be apportioned for each school not to exceed 15 in number in any one town, the remainder to be apportioned in proportion to the number of children from 5 to 15 years of age, inclusive, in the several towns according to the school census then last preceding. No town shall receive any part of this appropriation unless it raise by tax for the support of public schools a sum equal to the amount it may receive from the State treasury, and neglect or refusal to levy this tax by the 1st day of July forfeits the delinquent town's share of the State appropriation. There is an annual appropriation for the State aid to high schools and for the promotion of the consolidation of schools. A further sum is appropriated in aid of skilled supervision, either by single towns or jointly. There shall be an annual appropriation for the support and maintenance of evening schools in the several towns under the general supervision of the State board of education, who shall apportion said appropriation among them.

Every town shall establish and maintain a sufficient number of public schools, and towns may at any legal meeting grant and vote such sums of money as they shall judge necessary for the support of schools, purchase of sites for and the erection and repair of schoolhouses, and for the establishment and maintenance of school libraries.

SOUTH CAROLINA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State board—County superintendent—County board—School districts—Trustees.

State superintendent.—The State superintendent of education shall be elected at each general election, to serve two years; vacancies filled by governor; shall give bond of \$5,000, with sureties approved by the governor, and shall receive \$1,900 a year as compensation, with not to exceed \$300 for traveling expenses and \$900 for clerk hire. He shall have general supervision over all the schools of the State supported in whole or in part by public funds; visit every county as often as practicable for the purpose of inspecting the schools, awakening an interest in education, and diffusing as far as possible, by public addresses and personal communication with school officers, teachers, and parents, a knowledge of existing defects and desirable improvements in the same; secure, with the advice of the State board, uniformity of text-books throughout the State; prepare and transmit to the several county superintendents school registers, blank certificates, reports, and other forms and printed instructions necessary for school officers and teachers to make their reports and perform their other lawful duties; cause the school laws to be printed, with rules, regulations, forms, and

instructions, and shall send copies of the same to county superintendents for distribution. He shall make a report through the governor to the general assembly at each regular session, showing: (1) The whole number of pupils registered and enrolled in the common schools of the State during the preceding year (ended June 30), by counties; (2) number of white and colored, respectively, of each sex in attendance; (3) number of free schools in the State; (4) number of pupils studying each of the branches taught; (5) average wages paid to teachers of each sex, and to principals of schools and departments; (6) number of schoolhouses erected during the year, and location, material, and cost of same; (7) number previously erected, material of which constructed, condition and value, and the number with grounds inclosed; (8) counties in which teachers' institutes were held, and the number attending in each county; (9) such other statistical information as he may deem important, with such plans as he may have matured and the State board may have recommended for the improvement of the public school system; such statistics shall include those pertaining to all State institutions of higher learning, which institutions for this purpose shall make a report to the State superintendent by September 1 each year.

State board.—The governor, superintendent of education, and seven persons to be appointed by the governor, one from each Congressional district, who shall hold office four years unless sooner removed by the governor, shall constitute the State board of education. The governor shall be chairman and the State superintendent secretary, who shall also be custodian of records, papers, and effects of the board, and shall keep minutes of its proceedings, all of which records, etc., shall be open to inspection by the public. Members appointed by the governor shall receive the same mileage and per diem as members of general assembly, not to exceed twenty days in any year. The board shall constitute an advisory body, with whom the State superintendent shall have the right to consult when in doubt as to his official duty, and shall have power to review on appeal all decisions of county boards. Other powers and duties are: To adopt rules and regulations not inconsistent with law for their own government and the government of the public schools; prescribe and enforce rules for the examination of teachers; prescribe standards of proficiency which will entitle persons examined by county boards to certificates as teachers; prescribe and enforce courses of study and uniform series of text-books (which see); grant State teachers' certificates, and revoke same for cause; award scholarships created by the general assembly in State institutions.

County superintendent.—In each county there shall be elected a county superintendent of education, to serve two years; vacancies filled by State board. He shall give \$1,000 bond (\$5,000 in Saluda County). [Statute specifies salary for each county, ranging from \$300 to \$1,200 a year], with traveling expenses (not exceeding \$100) necessarily incurred in attending meetings called for the purpose of advancing educational interests, and in visiting schools in other counties in order to become familiar with their management and mode of teaching. He shall visit the schools in his county once each year, oftener if practicable, note the course and method of instruction and branches taught, and give such recommendation in each school as may be necessary so that uniformity in courses and methods may be secured as far as practicable; acquaint himself as far as practicable with the character and condition of each school, noting any deficiencies in government, or classification of pupils, or method of instruction, and make such suggestions in private to the teacher as to him shall appear necessary; note character and condition of schoolhouses and furniture, and make such suggestions to trustees as in his opinion may be needful; aid teachers in all proper efforts to improve themselves in their profession, and for this purpose shall conduct teachers' institutes and encourage the formation of teachers' associations, attending the meetings of such associations and giving advice and instruction regarding their conduct and management. He shall make an annual report to the grand jury, through the judge of the court of general sessions (third term), showing all claims filed, audited, allowed, and ordered paid by him during the year; by July 15 each year he shall report to the county treasurer all school claims, by districts, approved by him for the year preceding; and shall furnish trustees of his county copies of reports made by him to county auditor and treasurer as to persons listed and paying poll tax, and shall aid trustees in making all proper corrections. (See also County board.)

County board.—There shall be a county board of education in each county, composed of three members, one of whom shall be the county superintendent

and the other two shall be appointed by the State board every two years. County commissioners shall furnish said county board with a suitable office and supply the same with furniture, fuel, lights, stationery, postage, and other incidentals necessary to the proper transaction of official business. The two members of said county board appointed by the State board shall receive as compensation \$3 per day when employed (not to exceed seven days) and 5 cents per mile traveled in such public service, except that in counties having more than 50,000 population, per census of 1900, said members shall be compensated for not less than seven nor more than twenty days. The county board shall constitute an advisory body with whom the county superintendent may consult when in doubt as to his official duty, and shall decide local controversies relating to school law; but either party may appeal to the State board. The county board shall meet at least twice a year, times and places to be appointed by State board. Other duties and powers are: To examine applicants for teachers' certificates; divide their counties into school districts, and appoint three trustees for each district; levy an annual tax of 3 mills on the dollar, and apportion same, when collected, among the several school districts of their respective counties.

School districts.—County boards of education shall divide their counties into convenient school districts, in area from 9 to 49 square miles, and shall alter lines and create new districts from time to time as school interests may demand; but no new district shall be formed except upon petition of at least one-third of the qualified voters within such new territory, and no districts shall be consolidated except upon petition of at least one-third of the qualified voters of same. Territory lying within two or more counties may be united in one school district by joint action of the several county boards. Every such school district is a body politic and corporate for school purposes.

Trustees.—The county board, on the first Tuesday in July of each even year, shall appoint for each school district in their county three trustees from the qualified electors and taxpayers residing therein, to hold office two years. The trustees shall have the management and control of local public school interests, subject to the supervision of the county board, and shall visit each school in their district at least once in every school term. They shall hold a regular session at least two weeks before the commencement of any or every school term, and a special session upon call of the chairman or any two members. They are empowered to sell any school property, real or personal, within their district whenever they deem it expedient to do so, and apply proceeds to the district's school fund; but they shall first secure the consent of the county board, and within thirty days after such sale they shall report to county board terms and amount of same. All claims against a school district chargeable to the public school fund must be signed by at least a majority of the trustees. Other powers and duties of trustees are: To provide suitable schoolhouses, and make same comfortable; employ teachers from among those having certificates from their county board, fix their salaries, discharge them for sufficient cause, and may impose any additional examinations or qualifications they deem proper before or after employing teachers; suspend or dismiss pupils when necessary; call meetings of voters for consultation in regard to school interests; care for and control school property; may cross all bridges or ferries free of charge when on official business. It shall be unlawful for any school trustee to be pecuniarily interested in any contract with the school district of which he is a trustee, and no teacher shall be employed by a board of trustees who is related to a member of said board by consanguinity or affinity within the second degree, without the written approval of the county board and the written request of a majority of the parents or guardians of the children attending such school.

2. TEACHERS.

Certificates—Employment and duties—Institutes.

Certificates.—The county board shall examine all candidates for the position of teacher, and give to each person found qualified a certificate setting forth the branches such teacher is capable of teaching and the percentage attained in each branch, said certificate to be valid for two years unless sooner revoked, and may be renewed with or without examination, at the discretion of the county board. The county superintendent shall keep a register of the name, age, sex,

color, residence, and date of certificate of each person to whom a certificate is issued, and in case a certificate shall be canceled shall make a proper entry of same. The county board may revoke any certificate granted by them, for immoral or improper conduct or evident unfitness for teaching. The trustees of any school may impose any additional examinations and qualifications they may deem proper before or after employing a teacher. No examination as to qualification shall be made in the case of any applicant who produces a full diploma from any chartered college or university of the State, or Memminger Normal School, of Charleston, and furnishes satisfactory evidence of good moral character. The State board may grant State teachers' certificates and revoke same for cause.

Employment and duties.—The trustees employ teachers from among those having certificates from their county board, fix their salaries, and may discharge them for sufficient cause. The teacher or principal of every school shall keep and furnish annually to the trustees a list of all pupils that have attended school during the preceding scholastic year, showing name and residence of each pupil and number of days each attended. At the expiration of each school month each teacher shall make out and file with the clerk of the board of trustees a complete report of the whole number of pupils admitted to the school during the month (distinguishing between male and female), average attendance, branches taught, number studying each branch, and such other statistics as may be required by the county board of education. (See also Organization—Trustees, last sentence.)

Institutes.—Out of the surplus remaining of the net income accruing from the sale of liquors under the dispensary law, after equalizing deficiencies existing in the several counties and districts (see Finances—Revenue from sale of liquors), \$5,000 a year shall be appropriated for the purpose of maintaining institutes for the better instruction of the teachers of the public schools, same to be paid on the warrant of the governor and the State superintendent of education. (See also Organization—State superintendent; County superintendent.)

3. SCHOOLS.

Attendance—Studies—Text-books—Buildings and grounds.

Attendance.—It shall not be lawful for any person who is less than 6 nor more than 21 years of age to attend the public free schools of this State, nor for pupils of one race to attend schools provided by trustees for pupils of another race. The school year begins July 1 and ends June 30, and each school shall be kept open for a period of at least three months in each and every year. When pupils are so situated as to be better accommodated at the school of an adjoining district, the board of trustees of the district where they reside may transfer them to the more convenient district. Transfers shall not be made from one county into another without the consent of both county boards, but anyone paying taxes in two or more counties may send his children to school in either county.

Studies.—The county board of education and boards of trustees shall see that in every school under their care there shall be taught, as far as practicable, orthography, reading, writing, arithmetic, geography, English grammar, the elements of agriculture, history of the United States and of South Carolina, principles of the Constitution of the United States and of South Carolina, morals and good behavior, algebra, English literature, physiology and hygiene with special reference to the effects of alcoholic drinks and narcotics, and such other branches as the State board may from time to time direct.

Text-books.—It shall be the duty of the State board of education to prescribe and to enforce as far as practicable the use of a uniform series of text-books in the free public schools of the State, to enter into an agreement with the publishers of the books prescribed, fixing the period of prescription, the price above which the books shall not be retailed during said period, and a rate of discount at not less than which the books shall be furnished to the retail dealers. Board may require contracting publishers to establish one or more depositories in each county, at places to be designated by board; publishers shall give bond in a sum of not more than \$5,000, with a penalty of \$25 for each violation of the agreement, such bond to be approved by the attorney-general. State board shall not have power to change a book within five years of the date of its

adoption without permission of the general assembly, except for violation of agreement by the publisher. No teacher shall be allowed to use any book not so prescribed except by written consent of the State board. Whenever it shall appear to trustees that any patron of their school is unable by reason of poverty to purchase the necessary books for his or her children, said trustees may purchase such books and loan same to such children under such regulations as trustees may prescribe, the sum thus expended not to exceed 5 per cent of the school fund of the district for any year.

Buildings and grounds.—(See Organization—Trustees.)

The third Friday in November shall be duly observed as arbor day.

4. FINANCES.

Revenue from sale of liquors—County tax—District tax.

Revenue from sale of liquors.—All net income derived from the sale of liquors under the dispensary law shall be apportioned among the various counties of the State for the benefit of the common schools, in proportion to the deficiencies existing after the application of the 3-mill tax and the poll tax; and if there shall be a surplus remaining of such net income after such deficiencies shall have been equalized, it shall be devoted to public school purposes and be apportioned among the counties in proportion to enrollment in the public schools as shall appear by the report of the State superintendent for the next preceding scholastic year, and be distributed among the school districts and disbursed as other school funds (but see Teachers—Institutes). In determining whether any deficiency exists in any district for the purpose of distributing the said fund, the comptroller-general shall make his estimate upon the basis of an allowance out of the 3-mill tax and poll tax to each school in every district the sum of \$75 for the expense of a term of three months.

County tax.—The county board of education of each county shall levy an annual tax of 3 mills on the dollar upon all taxable property in the county, to be collected as other taxes, and on the 1st day of July each year, or as soon as practicable thereafter, the said fund shall be apportioned by the county board among the several school districts of their county in proportion to the number of pupils enrolled in the public schools therein; and the county board shall ascertain the amount of poll taxes collected in and for each school district, and notify the county treasurer and the trustees of each school district of the amount of poll taxes, as well as the amount of the aforesaid fund apportioned by them. For the purpose of said apportionment pupils shall not be deemed enrolled until after an attendance of at least ten school days during the preceding scholastic year. The school funds of each district shall be expended by the board of trustees for the best interests of the district, on their warrant approved by the county superintendent.

District tax.—The school districts of the several counties are the divisions for taxation for all school purposes. The voters of any school district who return property for taxation are authorized to levy and collect an annual supplemental school tax not to exceed 4 mills on the dollar, determined as follows: Upon petition of at least one-third of the resident voters and a like proportion of the resident freeholders of the age of 21 years being filed with the county board of education asking for such levy and stating the rate of tax proposed, said county board shall order the board of trustees of such school district to hold an election, at which only such electors as return real or personal property for taxation may vote; and if a majority shall vote for such levy, the said trustees shall furnish the county auditor with a statement of the amount so levied, and the auditor shall enter the same in the tax duplicates, and the county treasurer shall collect the same as other county and State taxes. Such levy shall be a lien on the property in such school district. Each taxpayer when he pays such tax may designate to which school in said district the money paid by him shall go, but when no designation is made by the taxpayer at the time of payment the money shall be expended as other school funds. Poll tax shall be expended for school purposes in the district from which it is collected.

SOUTH DAKOTA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—County board—County superintendent—District school board—City board of education.

State superintendent.—There shall be elected biennially a superintendent of public instruction, who shall be charged with the general supervision of all the county schools and the high schools and of all the city and county superintendents of the State. He shall meet the county superintendents at least once a year, prescribe rules for, attend, and assist at teachers' institutes, as far as consistent with his other duties, render a written opinion to any county superintendent asking it touching the administration of school law, and determine cases appealed to him from the county superintendents. He shall be provided with an office at the seat of government, where the records and other accumulations of his department shall be kept open to the governor or committees of either branch of the legislature. All books presented to his office or purchased therefor shall be catalogued and preserved for use of teachers of the State. He shall print and distribute blank forms, make a biennial report to the governor, prepare examination questions, may appoint a deputy, at \$1,500 per annum, shall appoint the institute conductors and convene them in annual session, and may grant life diplomas and State first-grade and second-grade certificates after holding examinations. His compensation shall be fixed by law, and in addition he shall receive \$500 for traveling expenses.

County board of education.—(See Schools—Text-books.)

County superintendent.—There shall be elected biennially a county superintendent of schools, who shall have the general supervision of the schools of his county. He shall visit each school in the county at least once annually, rectifying the government, instruction, and classification of the schools; at least once each year examine the records and accounts of the district school officers; encourage county normal institutes and district institutes, holding a county institute annually; require the district school officers to assemble annually for the purpose of discussing questions relative to their powers and duties; examine persons applying for positions in the schools and grant special first, second, and third grade certificates and regular third-grade certificates to those qualified; report the school census to the commissioner of school and public lands; annually report to the superintendent of public instruction a full abstract of the reports made to himself by the district officers; apportion school money; and he shall hold no other office.

He shall give bond, with two sureties, in the sum of \$500; may provide and furnish at county's expense an office at the county seat, where the accumulations of his department shall be kept, and shall receive a salary ranging between \$200 and \$1,500, to be determined on a basis of property valuation and population. Vacancy in the office is to be filled by the county commissioners. Failure to report to the State superintendent subjects the county superintendent to a fine of \$100 and liability to damages caused by his neglect.

District school board.—In all counties organized for school purposes under the district system each school district shall be and remain a district school corporation, and each civil township in every county in the State not organized for school purposes under the district system is constituted a district school corporation. Any township district may be subdivided by vote.

In every district a majority of the electors shall have authority to instruct the district school board concerning the management of the school and to levy taxes for the maintenance of the same.

There shall be elected annually one member of a district school board of three persons, who are to be styled, respectively, chairman, clerk, and treasurer. Boards shall hold regular meetings annually, though special meetings may be called.

The board shall have the general charge, direction, and management of the school or schools of the district, which they shall organize, maintain, and conveniently locate, and for which they shall employ teachers.

Township high schools may be established.

City boards of education.—When any city or town is divided into wards, there shall be elected annually a board of education consisting of two members from each ward and one at large, each to serve two years, one-half the board retiring

annually. In cities and towns and all corporations not organized as such not divided into wards there shall be as many members of the board of education as there are members of the council or board of trustees.

The board shall levy a tax to support the schools, elect a superintendent of schools not a member of their body, who shall supervise the schools at such salary and during such time as the board may determine.

All records must be kept and reports made in the English language.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—Teachers may be employed by the district board when holding a teacher's certificate valid in the county or city. The agreement shall be in the form of a written contract.

The State diploma shall be valid for life and authorize to teach in any school of the State. It is granted under the following conditions: The presentation of a diploma of an institution, with its course of study, or passage of an examination, ample proof of ten years' successful experience as a teacher, a satisfactory examination in the science and art of teaching, an examination in two branches of the following: Geometry, trigonometry, astronomy, chemistry, zoology, geology; and two from the following: English literature, rhetoric, general history, political economy, psychology. The applicant must also present a thesis on a topic selected by the State superintendent, must show a correct and intimate knowledge of English, must be recommended by persons of liberal education, and must have a good moral character. All recipients of State diplomas, except graduates of accredited South Dakota institutions, pay a fee of \$10.

A State certificate shall be valid for five years and authorize to teach in any school of the State. A resident graduate of any of the normal schools or resident graduate of the State university who has taken the course in pedagogy as given in that institution shall, upon presentation of a certified copy of his or her diploma, be entitled to receive a State certificate free of charge. An applicant for a State certificate a resident graduate of any college in this State, other than the State normal schools and the State university, having taken a course of study equivalent to the advanced course of study prescribed in any of the State normal schools or equivalent to the course of study prescribed in the collegiate department of the State university and to the pedagogical instruction in said State university required shall, upon filing a copy of his or her diploma, a copy of the course of study pursued specifically showing the amount of class work and a copy of the standings in each branch pursued, all duly certified or proved by the institution of which applicant is a graduate, be exempt from examination, and shall receive a State certificate free of charge. Other applicants shall present evidence of twenty-four months' successful experience and pass a satisfactory examination in algebra, geometry, natural philosophy, physiology, hygiene, drawing, civil government, didactics, general history, American literature, English grammar, orthography, and penmanship. The character of the papers submitted shall determine the candidate's knowledge of English grammar, orthography, and penmanship. The possession of a good moral character shall be deemed a necessary requisite. Graduates of accredited South Dakota institutions receive State certificates free of charge; all others pay a fee of \$5.

The State superintendent shall cause to be held at least two examinations each year in every county of the State, at such convenient places as may be designated by the county superintendent. The time for such examinations shall be uniform throughout the State, and the examinations shall be conducted by the county superintendent of the county in which the examinations are held, or by persons appointed by him, strictly according to regulations prescribed by the department of public instruction designed to secure uniformity and fairness. Upon these examinations, the superintendent of public instruction is authorized to issue first grade certificates valid for three years and second grade certificates valid for two years, and any county superintendent may issue third grade certificates valid for one year to those not eligible for first and second grade certificates who pass satisfactory examination in second grade subjects.

A county superintendent may also, on his own examination, issue a certificate of the first, second, or third grade to applicants who present satisfactory proof that they were unable to be present at the public examination, such certificate

to be valid only in a district specified on its face and until the time of the next succeeding public examination. A first-grade certificate shall be valid in any county in the State. Applicants for certificates of this grade shall pass an examination in orthography, reading, writing, arithmetic, geography, physical geography, English grammar, physiology and hygiene, history of the United States, civil government, current events, American literature, bookkeeping, drawing, and didactics. A second-grade certificate shall be valid in the county in which the examination is held, and may be made valid in any county by the indorsement of the county superintendent of said county. Applicants for certificates of this grade shall pass examinations in orthography, reading, writing, arithmetic, physiology and hygiene, geography, English grammar, history of the United States, civil government, and didactics. Not more than two third-grade certificates may be issued to the same party in any county. No teacher shall be entitled to receive a certificate of any grade who fails to give proper evidence of possessing a good moral character. The county superintendent shall require a fee of \$2 from every applicant for a certificate; said fee so collected to be deposited at the close of each examination with the county treasurer, one-half to the credit of the county institute fund and one-half to the credit of the general fund of the State, to be turned into the State treasury.

The board of education in cities of the first class shall appoint two competent persons, who, with the city superintendent, shall examine all persons who apply for positions as teachers, and no one who does not hold a State certificate or diploma shall be employed unless holding a certificate from the examining committee.

Teachers shall give definite instruction in morals, temperance, and humane treatment of animals; shall keep the register and make the reports required on penalty of loss of one-tenth of their annual pay.

In cities and other independent districts persons exclusively engaged in teaching music, drawing, penmanship, bookkeeping, foreign languages, or kindergarten methods shall not be required to hold a county certificate.

Institutes.—The county superintendent shall annually hold a normal institute between April 1 and September 15, of not less than five days' duration, for the instruction of teachers and of those desiring to teach, the conductor of which shall be appointed by the State superintendent. City teachers must attend county institutes. It is the duty of the county superintendent to hold two district institutes during the year, either in a district or group of districts.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Libraries—Buildings.

Attendance.—If any district fails to levy a sufficient tax to support a school for the six months, the board of county commissioners shall levy a tax on the property of the district that will be sufficient for the purpose, not to exceed 2 per cent of the taxable property in the district. Any school may be discontinued by its district board for the purpose of combining two or more schools into one and making arrangements for the transportation of the pupils to said school or schools if, in the judgment of the board, it is to the best interest of the pupils and the district. Schools shall be free to all pupils from 6 to 20 years of age.

Every person having under his control a child between the ages of 8 and 14 years shall cause such child to attend for at least twelve weeks annually, at least eight of which shall be consecutive, in some public day school in the district in which he resides, which time shall commence with the beginning of the first term of the school year or as soon thereafter as due notice shall be served upon the person having such control of his duty under this act. For every neglect of such duty the person offending shall forfeit to the use of the public schools of his school corporation a sum not less than \$10 nor more than \$20, and shall stand committed until such fine and costs of suit are paid. But if the person so neglecting shall show to the board of education or district school board, as the case may be, that such child has attended for a like period of time a private day school or that instruction has otherwise been given for a like period of time to such child in the branches commonly taught in a public school, that such child has already acquired the branches of learning taught in the public schools, or that his physical or mental condition as declared by a competent physician is such as to render such attendance inexpedient and impracticable, then such penalty shall not be incurred. Such fine shall be paid, when collected, to the county treasurer or the treasurer of such city or independent district

in which such child and parents reside, to be credited by him as other money raised for school purposes to the district from which it came.

It shall be the duty of the president of the board of education in every city or other independent district and the chairman of every district school board carefully to inquire concerning all supposed violations of this article and to enter complaint against all persons who shall appear to be guilty of such violation. It shall also be the duty of said officers to arrest children of a school-going age who habitually haunt public places and have no lawful occupation, and also truant children who absent themselves from school without leave, and to place them in charge of the teacher having charge of the public schools which said children are by law entitled to attend. And it shall be the duty of said teacher to assign such children to the proper classes and to instruct them in such studies as they are fitted to pursue.

Any school officer failing or neglecting to perform the duty required of him by this article shall be liable to a fine of not less than \$10 nor more than \$20 for every such offense.

No child between 8 and 14 years of age shall be employed in any mine, factory, workshop, or mercantile establishment, or, except by his parent or guardian, in any other manner during the hours when the public schools in the city, town, village, or district are in session, unless the person, firm, or corporation employing him shall first procure a certificate from the superintendent of the schools of the city, town, or village, if one be employed, otherwise from the clerk of the school board or board of education, stating that such child has attended school for the period of twelve weeks during the year, as required by law, or has been excused from attendance; and it shall be the duty of such superintendent or clerk to furnish such certificate upon application to those entitled to demand it. Every owner, superintendent, or overseer of any mine, factory, workshop, or mercantile establishment, and any other person who shall employ any child between 8 and 14 years contrary to these provisions shall be fined for every offense from \$10 to \$20 and costs. And any person having control of a child, who, with intent to evade these provisions, shall willfully make a false statement concerning the age of the child or the time the child has attended school shall be fined for each offense from \$10 to \$20.

Any pupil who shall successfully complete the work of the eighth grade as established in the State course of study is privileged to continue his school work up to and including the twelfth grade by attending any neighboring graded school furnishing a higher course of study; and the tuition charges therefor shall be paid by the board of his home district, provided his home district does not offer instruction in such higher grades.

Character of instruction.—Teachers shall classify the work in their schools in accordance with the suggestions, grades, and outlines as prescribed in the course of study recommended by a majority of the county superintendents of the State and the State superintendent, and shall hold examinations. Instruction shall be given in reading, writing, orthography, arithmetic, geography, English grammar, history of the United States, temperance, physiology and hygiene, and civil government. It shall be the duty of the district board to provide for such extra branches of study as may be desired by the electors.

Text-books.—The county superintendent, the president of the board of education of all cities or towns, the county auditor, the county attorney, the board of county commissioners, their successors in office, and one person from each commissioner's district who shall be selected by the members of the school boards of such commissioner's district present at a meeting to be called by the county superintendent, shall constitute the county board of education of each county in this State for the purpose of selecting and adopting all the text-books needed for use in the public schools in the county. The county superintendent shall in all cases be chairman of the county board of education, and the county auditor, secretary, and a majority of said board shall constitute a quorum for the transaction of business.

The county board of education shall meet at the office of the county superintendent of each county of the State on the second Tuesday of June, 1907, and every five years thereafter, and select and adopt a complete series of text-books to be used in the schools of the county: *Provided*, That the boards of education in cities and towns may adopt additional books for higher classes in their schools. The county board of education shall advertise for twenty days in a newspaper published in each county that at a time and place named in said notice said board will receive sealed bids for furnishing school books to the pupils of all public schools in the county for a term of five years.

Libraries.—The county treasurer shall withhold from the apportionment received from the interest and income fund or other income for the schools of his county annually an amount equal to 10 cents per capita for each person of school age, which money shall constitute a library fund and shall be used for the purchase of library books. Annually, between the 1st day of July and the 1st day of September, the county library board shall meet at the call of the county superintendent and expend the money thus provided in the purchase of books selected from the list prepared by the State superintendent.

Buildings.—The district board shall purchase or lease a site designated by voters, and build, hire, or purchase a schoolhouse, as directed by them.

Every person, pupil or other, who willfully molests or disturbs a public school when in session shall be fined \$25 or less, or be imprisoned in the county jail for not more than ten days, or both. Any pupil who cuts, defaces, or otherwise injures any schoolhouse or its appurtenances is liable to suspension or expulsion, and the parents are liable for damages.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—All proceeds of the sale of public lands that have heretofore been or may hereafter be given by the United States for the use of public schools in the State, all such per centum as may be granted by the United States on the sale of public lands, the proceeds of all property that shall fall to the State by escheat, the proceeds of all gifts or donations to the State for public schools or not otherwise appropriated by the terms of the gift, and all property otherwise acquired for public schools shall be and remain a perpetual fund for the maintenance of public schools in the State. It shall be deemed a trust fund held by the State. The principal shall forever remain inviolate, and may be increased, but shall never be diminished, and the State shall make good all losses thereof which may in any manner occur.

The interest and income of this fund, together with the net proceeds of all fines for violation of State laws and all other sums which may be added thereto by law, shall be faithfully used and applied each year for the benefit of the public schools of the State, and shall be for this purpose apportioned among all the public school corporations of the State in proportion to the number of children in each of school age, as may be fixed by law; and no part of the fund, either principal or interest, shall ever be diverted, even temporarily, from this purpose or used for any other purpose whatever than the maintenance of public schools for the equal benefit of all the people of the State.

Taxation.—The county commissioners shall, at the time of making the annual assessment and levy of taxes, levy a tax of \$1 on each elector in the county for the support of common schools, and may levy a further general tax of 2 mills on the dollar upon all taxable property in the county to be applied to the same purpose, which shall, with the money received from the State, constitute and be known as "the county general school fund;" and they shall levy such further tax upon the taxable property of each school district as the board thereof shall certify is required for the support of the schools, and when collected shall be credited to the district to which it belongs. But the electors in every district shall have authority to levy taxes for the same, the tax not to exceed 2 per cent of the taxable property in the district, and in case of failure of any district to levy a sufficient tax to support school for six months, the board of county commissioners shall levy an amount not to exceed 2 per cent of the taxable property.

TENNESSEE.

1. ORGANIZATION OF THE SYSTEM.

State board of education—State superintendent—County superintendent—District directors—City boards of education.

State board of education.—The governor of the State shall appoint a State board of education, to consist of himself, the State superintendent, and six members. Two of the appointed members shall retire every two years. The board shall locate and make arrangements for opening first-class schools in every

respect for the training of teachers. The board may receive contributions of money from the trustees of the Peabody Educational Fund or property or funds from any other source for the benefit of the schools it establishes, and the trustees of colleges, universities, or educational institutions shall have power to give the use of their property to the State board for the benefit of such schools. The State superintendent shall be secretary and treasurer of the State board of education.

State superintendent.—The State superintendent shall be a person of literary and scientific attainments and of skill and experience in the art of teaching, and shall be nominated by the governor, and confirmed by the senate for a term of two years, at an annual salary of \$2,000, to be paid from the school money in the State treasury. He shall devote his entire time to the duties of his office; shall be a member of the State board of education and of all other State educational bodies and associations; shall have an office in the State capitol, and is liable to removal for misconduct. His duties shall be to collect and disseminate statistical and other information relating to the public schools; to make tours of inspection among the public schools throughout the State; to see that the school laws and regulations are faithfully executed; to prepare and distribute blank forms for all returns to be made by school officers; to have printed and distributed to county superintendents and other school officers as many copies of the school laws as may be necessary, with appropriate forms and instructions for carrying said laws into execution; to appoint, at his discretion, persons in each county to visit, without compensation, and examine all or any of the public schools therein and to report to him touching all such matters as he may indicate respecting their condition, management, and improvement; to appoint a person to make the report required from the county superintendent when that officer neglects his duty; to prescribe the mode of examining and licensing school teachers, and their necessary qualifications; to preserve in his office all documents and matters relative to educational subjects that may come to it; to report to the comptroller the school population of each county; to annually submit to the governor a detailed report of his official proceedings for the year ending June 30 preceding, exhibiting a plain statistical account of receipts and expenditures for public schools and of their condition and progress, showing the number of children, by sex and race, between 6 and 21 years of age; the enrollment, the average number belonging, and the per cent of attendance; the average salary paid to teachers, by sex, the amount of each branch of school expenditures, severally; the cost of education per scholar, and whatever else may tend to show the degree of success and usefulness of the system.

County superintendent.—The county superintendent shall be elected by the county court biennially, but no member of the county court shall be eligible. He shall be a person of literary and scientific attainments, and of skill in the theory and art of teaching, and shall, before each election, file a certificate of qualification, given by the State board of education, in pursuance of the result of a public examination before a commission composed of three residents of the county (appointed by the county court) competent to conduct such an examination. Women of 21 years of age or more are eligible. The county court fixes the salary of the commissioner.

The duties of the county superintendent shall be as follows: To supervise the public schools; to visit the schools of the several districts from time to time; to confer with teachers and officers; to ascertain the merits of text-books, and to suggest changes tending to bring about uniformity in the course of study, when it can be done without increased expense to the parent; to see that the district directors make their reports, or to have them made should the directors fail; to perform such duties in relation to the examination of teachers and issuing to them certificates of qualification as may be required of him by the State superintendent; to report to the county trustees, as soon as ascertained, the scholastic population of each district on the last day of June; to observe such directions and regulations as the State superintendent may prescribe; to make an annual report, and such other special reports as the State superintendent may call for, and to keep a record of his official acts, and of the boundaries of the districts of the county. The county superintendent in counties having a population of 30,000 or more is prohibited from teaching in any public school and from taking any contract for building or repairing school property, and from becoming the owner of a school warrant other than that received for his own services as county commissioner. In addition to the punishment prescribed by statute for misdemeanors in office, a superin-

tendent in counties of 30,000 or more who teaches in any public school shall be fined not less than \$25 nor more than \$50, to go to the benefit of the public school fund.

District school directors.—Three district school directors are elected biennially, and any person shall be eligible to the office of director who can read intelligently and write legibly, perform the duties required, and who resides in the district. If a director moves from the district his office is vacated. If from any cause directors shall not be elected, or when vacancies occur, the county superintendent shall fill such vacancies. No director shall be a teacher in the public schools of his district, nor take any contract for building a schoolhouse, nor any contract which his board is competent to make, nor become the owner of a school warrant.

The duties of school directors shall be as follows: To explain and enforce the school laws and regulations; to visit the public schools within the district from time to time and see that they are legally and efficiently conducted; to subdivide their districts; to employ and pay teachers, and to dismiss them for cause; to suspend or dismiss pupils when the prosperity or efficiency of the school makes it necessary; to use the school fund apportioned to their district, whether derived from donations or other sources, in such manner as will promote the interest of public schools; to see that the school census is taken in the proper manner on the required date; to hold meetings at the times they shall prescribe; to call meetings of the people for consultation in regard to school matters; to care for and control public school property; to report any special matter required by the county superintendent, and to report to him annually on all subjects indicated in the blank forms supplied for the purpose, and until such report shall have been made the member of the board acting as clerk shall not draw his pay. They shall keep separate and apart schools for the white and colored children and employ teachers of like race, respectively, for such schools, under penalty of \$50 fine and thirty days' to six months' imprisonment.

City boards of education.—The several incorporated cities and towns within this State may, through their boards of mayor and aldermen, establish and maintain within their respective corporate limits a system of high graded common schools, and have power to appoint a board of education consisting of not exceeding six qualified citizens residing within their corporate limits. The board of education shall have full power as trustees or directors to manage and control such schools, to elect or to employ well-qualified teachers, and to prescribe all needful rules and regulations. Two members of the board shall retire annually.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary education—Meetings.

Appointment, qualifications, and duties.—No teacher of public schools shall be employed or receive any pay from the public funds unless having a certificate of qualification from the county superintendent, and any officer sanctioning the payment for services rendered by an illegally employed person shall be subject to a penalty of not less than \$5 nor more than \$50, and for like services women shall be paid the same as men. The county superintendent shall perform such duties in relation to the examination of teachers and issuing to them certificates of qualification as may be required of him by the State superintendent. Written contracts shall be made with all public school teachers, at fixed rates by the month, the contract to be signed in duplicate. Every public school teacher shall keep a daily register of facts pertaining to his or her school in proper form and must deliver it to the clerk of the district board before warrant may be issued for the amount of his or her salary. Any teacher may for cause suspend pupils from attendance on the school until the case is decided by the board of school directors, and the teacher has power to punish for offenses committed on the way to and from school.

Preliminary training.—The establishment of a normal school or schools is authorized to be effected by the board of education. The said normal school or schools shall be made in every respect first-class institutions for the professional education of teachers; the most approved methods of instruction shall be adopted, and none but teachers experienced and skilled shall be employed to take charge of them. In the location of such school or schools the State board shall give preference to such locality accessible to all parts of the State as shall offer gratuitously the most suitable grounds and buildings for the establishment of the same. No pupil shall be admitted into said schools who is under 16 or over 30

years of age, and who shall not have undergone satisfactorily such examination as may be prescribed by the State board of education. Those already engaged in teaching may enter said normal school or schools as pupils upon conditions fixed by the State board. Pupils of the public schools may be recommended for admission into said normal school or schools by the county superintendent on consultation with the directors of the school districts of his county, and in cities by the superintendent of public schools, and such pupils so recommended and who pass a satisfactory examination shall have precedence over all other applicants. Diplomas shall be granted to those honorably completing the course of study exempting the holder from examination as a condition precedent to employment in the public schools of the State. The salaries of principals, teachers, and other officers of said normal schools shall be determined by the State board of education, and the board is authorized to expend annually for the support of the normal college at Nashville, exclusively, \$20,000 out of any funds in the State treasury not otherwise appropriated, provided that the Peabody board of trustees shall allow to the State 33 scholarships of \$100 each and traveling expenses, one scholarship to be allowed each senatorial district in the State, and to be given after a competitive examination as prescribed by the State board.

Three thousand three hundred dollars, or so much thereof as may be deemed necessary, shall be intrusted to the State board of education for the higher and normal education of the children of Tennessee of African descent, and upon the order of the board the comptroller shall issue his warrant for the same to the president or financial manager of approved institutions of learning for scholarships for the benefit of such of the aforesaid children as may apply therefor, under such regulations as may be prescribed by the board of education. The amount thus appropriated shall be a separate fund, over and above the \$20,000 annually granted to the State normal college, and shall be used to defray the expenses of two colored pupils from each senatorial district of the State in approved institutions of learning. The State superintendent, as secretary and treasurer of the State board, shall disburse all moneys appropriated for normal school work, and shall keep a correct record of all official acts performed by him.

The State board of education may authorize normal schools to issue diplomas which license the holder to teach in any public school in the State.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—The public schools shall be free to all persons between the ages of 6 and 21 years residing in the district, but white persons and colored persons shall not be taught in the same school. The director of each school district shall establish and maintain therein as many primary schools as may be necessary to teach the children of the district, but they shall have due regard to increasing the length of the school term for the benefit of the district by limiting the number of schools. (See also Finances—Taxation.)

Character of instruction.—There shall be two classes of district public schools, designated, respectively, primary and secondary. The directors of each school district shall establish and maintain therein as many primary schools as may be necessary, in which shall be taught orthography, reading, writing, arithmetic, grammar, geography, history of Tennessee and of the United States, the Federal Constitution, physiology and hygiene, with especial reference to the injurious effects of narcotics and alcoholic stimulants; vocal music and elocution or the art of public speaking may be taught, but no other branches shall be introduced. The course of study in the public schools of each county shall be graded and the system of promoting pupils shall be fixed by the county superintendent in accordance with the general regulations of the State superintendent. The course of study in the primary schools shall consist of five grades, and in the secondary schools shall consist of eight grades, the first five grades in each being identical. Pupils completing the first five grades and attaining proficiency therein shall receive a certificate from the State superintendent, certifying that the holder has completed the primary school course, which shall be countersigned by the county superintendent, district directors, and the teacher or teachers of the school, and shall entitle the holder to enter the sixth grade of the secondary school of any school district or of the high school of any high school district in which the holder resides. Pupils completing the eighth grade in the course of the secondary schools and obtaining proficiency therein shall receive a diploma from the State superintendent, which shall be countersigned by the

county superintendent and by the district directors and by the teachers of the school, which shall entitle the holder to enter the ninth grade of the high school of any high school district in which the holder resides.

The directors of each school district, whenever the interests of the district shall require it, may establish and maintain therein one or more secondary schools. Every secondary school shall consist of a principal, and, when necessary, an assistant or assistants may be employed. In every secondary school shall be taught orthography, reading, writing, arithmetic, grammar, geography, history and constitution of Tennessee and of the United States, elementary geology of Tennessee, elementary principles of agriculture, of algebra, of plane geometry, of natural philosophy, bookkeeping, elementary physiology and hygiene (with especial reference to the effects of alcoholic drinks, narcotics, and cigarette smoking), elements of civil government, and rhetoric or higher English. Practice shall be given in elocution or in the art of public speaking. Vocal music may be taught, but no other branches shall be introduced.

District directors shall have power to make contracts of consolidation with the trustees or other authorities of academies, seminaries, colleges, or private schools, by which the public schools may be taught in such institutions, provided that the branches of study designated in the preceding paragraphs shall be taught free of any charge in such consolidated schools, and that the authority of the county superintendent, district directors, and other school officers over those studying such branches shall be as full and ample as in the ordinary public schools.

Text-books.—The governor and State superintendent, together with three members of the State board of education, to be named by the governor, constitute a text-book commission, whose duty it is to adopt books for use in all the public schools of the State for a period of five years. Such books shall be used to the exclusion of all others, violation of which is punishable by fine of not less than \$10 nor more than \$50.

Buildings.—The care and management of public school property of the district is in the hands of the directors.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The permanent school fund of the State shall be the \$1,500,000 ascertained and declared by the code and recognized by the State to be the permanent school fund. To this shall be added the interest which has accrued on the same and not been paid by the State, amounting on January 1, 1873, to \$1,012,500, making the entire permanent State school fund \$2,512,500, for which a certificate of indebtedness shall [1873] be issued, signed by the governor under the great seal of the State, and deposited with the comptroller of the treasury, which shall show on its face the purpose for which it was issued and shall provide for the payment of the interest thereon at the rate of 6 per cent, payable semiannually on the 1st day of July and January in each year, commencing July 1, 1873.

To the permanent State fund may be added from time to time the proceeds of all escheated property, of all property forfeited to the State, of all lands sold and bought in for taxes, of the personal effects of intestates having no kindred entitled thereto by the laws of distribution, and donations made to the State for the support of the public schools, unless otherwise directed by the donors. The principal of said fund shall always remain unimpaired and entire, and the annual income arising therefrom shall be dedicated to the support and maintenance of the public schools of the State. [To this has been added the surplus in the State treasury at the end of each year.]

The State school fund for the annual support of public schools shall be the annual proceeds of the permanent State school fund, any money that may come into the State treasury for the purpose under the present or future laws of the State, and any money that may come into the State treasury for the purpose from any source whatever, and the annual fund shall be apportioned semiannually by the comptroller among the several counties according to their scholastic population as reported to him by the State superintendent, issuing his warrant to the county trustee.

Taxation.—Every male inhabitant in the State subject thereto shall pay a poll tax of \$1 for the support of the public schools, which shall be collected as other taxes are, and paid over to the county trustee in the county where col-

lected, and distributed therein to each school district according to scholastic population.

A tax of $1\frac{1}{2}$ mills on \$1 shall be annually assessed upon all property subject to taxation for the support of the public schools, which shall be collected as other taxes are, and paid over to the county trustee in the county where collected, and distributed therein to each school district according to scholastic population.

In case there is an insufficient sum to maintain the school for five months, it is the duty of the county court to levy an additional tax sufficient for that purpose, or to submit the proposition to a vote of the people, and they may levy a tax to prolong the school beyond the five months, the tax to be levied on all property, polls, and privileges liable to taxation, but shall not exceed the entire State tax. All school money coming into the hands of the State or county treasurer shall be kept separate and apart from any State or county funds in their hands. All unexpended sums for school purposes in the district treasury shall not be returned to county trustee for redistribution, but shall be credited to such district and added to its share of the next apportionment.

Cities and incorporated towns in which have been established higher graded schools are authorized to supplement the school fund derived from State and county taxes by an additional municipal tax or levy for their support, provided the town or municipality does not exceed its lawful limit of taxation in making such additional levy,

TEXAS.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—State board of examiners—County superintendent—County board of examiners—School district committee—City board of examiners.

State board.—The governor, secretary of state, and comptroller shall constitute a State board of education, of which the State superintendent shall be secretary. The board shall make an apportionment of the available school fund among the several counties of the State and the cities and towns having separate school organizations, according to the population of each. Appeals from the rulings of the State superintendent shall be to this board. It is the duty of the board to invest the permanent school fund in accordance with law.

State board of examiners.—The State superintendent may appoint a State board of examiners, consisting of three or more competent teachers, to serve at his pleasure.

State superintendent.—There shall be elected at each general election for State and county officers a State superintendent of public instruction, who shall hold his office for two years and receive a salary of \$2,500, and may employ such clerical assistance as may be allowed by the State board. He shall be charged with the administration of the school law and a general superintendency of the business relating to the public schools of the State, shall hear all appeals from the decisions of subordinate school officers, prescribe and furnish suitable forms for records and reports, issue circulars of instruction to school officers, and examine and approve all accounts of whatsoever kind against the school fund.

County board of examiners.—There shall be a county board of examiners of three members, appointed by the county superintendent, or by the county judge if there be no superintendent, each of whom must hold a first or higher grade certificate of the county. They serve during the pleasure of the county superintendent.

County superintendent.—The commissioners' court of any county may provide for the election of a county superintendent of public schools, who shall hold for two years, be a person of educational attainments, good moral character and executive ability, a qualified voter of said county, and the holder of a first-grade teacher's certificate. He shall have the immediate supervision of all matters pertaining to public education, shall confer with teachers, deliver lectures, hold institutes, approve all vouchers drawn against the school fund, examine contracts made by trustees with teachers and, if proper, approve them, distribute blank books and forms, and appoint the county board of examiners and census trustees. In counties having a school population of 2,000 and not exceeding

3,000 the county superintendent shall receive \$800 per annum, in counties of 3,000 to 4,000 he shall receive \$900, in counties of 4,000 to 5,000 he shall receive \$1,000, in counties of 5,000 or more he shall receive \$1,200. In counties having no county superintendent the county judge shall act, and shall receive such salary as ex officio county superintendent as may be provided by the commissioners' court, not to exceed \$600 per annum.

District school trustees.—It is the duty of the county commissioners' court to subdivide their county into school districts as convenient as possible for the attendance of the children at the school or schools to be established therein. The voters of the district shall elect three trustees, whose terms of office shall be for two years, one trustee to be elected one year and two the next. They shall determine the number of schools and their location, and when they shall be opened and when closed, contract with teachers, and manage and supervise the schools. They shall approve all teachers' vouchers and all other claims against the school fund of their district, and shall have the power to admit pupils over and under scholastic age.

A town or village having 200 inhabitants or over may incorporate as an independent district for free school purposes only, and may include within its bounds territory not exceeding an area of 25 square miles. For such incorporated town or village there shall be elected 7 trustees, for terms of two years, 3 retiring one year and 4 the next, who shall in general be vested with all powers, rights and duties in regard to establishing and maintaining free schools, including the power of taxation, as is vested in a council or board of aldermen of incorporated cities and towns. The trustees have authority to levy a special tax not exceeding one-fourth of 1 per cent per annum for bond or building purposes, and an additional special tax not exceeding one-half of 1 per cent for maintenance and support of the free schools: *Provided*, No such tax be levied or no bonds be issued until an election shall have been held for the purpose of determining the question.

Cities and towns in the State are authorized to assume exclusive control of all the public schools within their limits and to govern them in any way not inconsistent with law; to elect, or the council may appoint, the board of trustees, consisting of 7 members to serve for two years, 3 members retiring one year and 4 the next. No compensation is allowed them.

City boards of examiners.—A city or town which has 500 scholastic population or more, and has become an independent school district, and which levies a local tax for educational purposes, or maintains a system of free schools for nine months in each year, and which has employed a superintendent of city schools, may have a city board of examiners. Said board of examiners shall in all cases consist of the superintendent of the city schools, together with two other persons appointed by him, who shall be teachers, and the superintendent shall not be subject to examination.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Institutes.

Appointment, qualifications, and duties.—Any teacher desiring to teach in any city, town, or district in the State shall, before contracting with any board of trustees or school board, exhibit a teacher's certificate. Anyone who teaches in any public school of this State without a valid certificate shall not be paid from the free-school funds, and forgery of a certificate shall be punished by confinement in the penitentiary for a term of not less than two nor more than seven years. Applicants for examination must apply to the county superintendent, stating class of certificate desired, and by him are sent to the board of county examiners, the applicants having been satisfactory to the county superintendent and having each deposited \$2 as an examination fee. The applicants must speak the English language fluently, and be of good moral character.

Certificates granted are of three kinds: A county certificate, valid only within the county; a city certificate, valid only within the city; a State certificate, valid anywhere within the State. County certificates shall be of four classes—first, second, and third grades, and permanent—and are issued by the county superintendents on recommendation of the county boards of examiners, who shall hold an examination on the first Friday and following Saturday in the months of May, September, and December. The questions are furnished by the State superintendent, and the rules and regulations are prescribed by him and the county superintendent.

An applicant for a third-grade certificate shall be examined in spelling, reading, writing, arithmetic, English grammar, geography, Texas history, physiology and hygiene with special reference to narcotics, and school management and methods of teaching, and must, in order to obtain a certificate, average not less than 70 nor make less than 50 on any subject. An applicant for a second-grade certificate shall be examined on the nine subjects mentioned, and in addition United States history, elementary principles of civil government, English composition, and physical geography. The second-grade certificate is good for three years, and the applicant must make an average of 75 on all and not less than 50 on any one subject; but if he make 85 instead of 75, the certificate is good for five years. An applicant for the first-grade certificate shall be examined in the subjects prescribed for the second grade, and also in physics, algebra, elements of geometry, and general history. The first-grade certificate is valid for four or six years, upon the same conditions as a certificate of the second grade. An applicant for a permanent certificate shall be examined on the subjects required for a first-grade certificate, and in addition on the history of education, general history, psychology, English and American literature, chemistry, solid geometry, plane trigonometry, and elementary double-entry bookkeeping. The general average required to pass for a permanent certificate is 85 and not less than 50 in any subject. The certificate lapses if the holder withdraws three continuous years from teaching. On application of a candidate for a first or second grade State or a permanent certificate, the county superintendent shall forward the papers to the State superintendent, who shall lay them before the State board of examiners, together with the fee of \$1 furnished by the candidate, and if they find the papers rightly graded they shall recommend that the candidate be given a new certificate in lieu of his county certificate, which shall entitle him to teach in any county.

City boards of examiners may issue certificates of two kinds, a temporary and a permanent certificate, and of three classes for each kind: Primary, intermediate, and high school teachers' certificates. A temporary certificate is good for four years, and a permanent certificate during good behavior. (The force of the normal school certificate is given below.)

It shall be the duty of every teacher to use the English language exclusively in the free public schools, though any other language may be taught as a branch of study; to attend summer normals and county institutes as far as possible; to keep daily registers in which the names, ages, and studies of the pupils and their attendance shall be recorded, and such other matters as may be prescribed by the State superintendent; to make monthly reports upon such subjects as may be designated by the State or county superintendent, which are to be approved by the trustees. They shall also make such reports at the end of the term as may be prescribed by the State superintendent, and until made their last month's salary shall not be paid.

Preliminary training.—Normal instruction for white persons shall be given in the Sam Houston Normal Institute, the North Texas State Normal College, and the Southwest Texas Normal School, and for colored persons in the Prairie View Normal School. Each of the white schools under the supervision of the State board of education offers 2 scholarships for every member of the legislature, 6 to the lieutenant-governor, 9 to each of the three members of the State board of education and to the State superintendent, for persons 16 years of age or over who sign a written statement that it is their intention to teach at least one year after leaving the school; the normal school for colored persons, 1 scholarship for each member of the legislature, which school is under the immediate authority of the board of directors of the Agricultural and Mechanical College of Texas.

Diplomas given by the University of Texas to students completing the degree course in pedagogy or some other course shall have the force of permanent State certificates. Those showing completion of the special professional course shall have the force of first-grade State certificates; those showing completion of the course in elementary pedagogy shall have the force of State certificates of the first grade for a period of two years. Any teacher of three years' standing in Texas who holds a degree from a university or college of the first class, to be determined by the State board of examiners, may receive a permanent State certificate. Those holding a diploma from a Texas State normal school, or from the Peabody Normal School, may teach in the public schools as being entitled to a permanent State certificate without examination.

Normal institutes.—The State superintendent shall prescribe regulations for holding summer normal institutes and prescribe rules for granting summer

normal certificates, which shall be State certificates good for four or six years, according to whether the general average be 75 or 85. The county superintendent shall, with such assistance as may be necessary, organize and hold at least three institutes of two days each during the year, and failure to conform to this will be cause for his removal. It is the duty of all teachers in the public schools in the State to attend the summer normals and county institutes as far as possible.

3. SCHOOLS.

Attendance—Character of instruction—Buildings.

Attendance.—The children of the white and colored races shall be taught in separate schools, and in no case shall any school consisting partly of white and partly of colored or mixed blood receive any aid from the public school fund. All children over 7 years of age and under 17 at the beginning of any scholastic year shall be entitled to the benefit of the public free schools.

Character of instruction.—There shall be taught in the public schools orthography, reading in English, penmanship, arithmetic, English grammar, modern geography, composition, physiology and hygiene, including the effects of alcoholic stimulants and narcotics on the human system, mental arithmetic, Texas history, United States history, civil government, and other branches, as may be agreed upon by the trustees or directed by the State superintendent. Suitable instruction shall be given the primary grades once each week regarding kindness to animals and the protection of birds and their nests and eggs.

Buildings.—The law limits the use of the State and county available school fund for the payment of teachers' and superintendents' salaries, fees for scholastic census, and commission to the county treasurer for receiving and disbursing the school funds, provided that when the State available school fund in any city or county is sufficient to maintain the schools in any year for at least eight months and leave a surplus, such surplus may be expended for purchasing appliances and supplies, payment of insurance premiums, janitors, and other employees, for buying school sites, buying, building, repairing, and renting schoolhouses, and for other purposes necessary in the conduct of the public schools. The people of any common school district may, upon proper petition to the commissioners' court, vote upon themselves a special tax not to exceed in any year 20 cents on the \$100 valuation of taxable property for the building of schoolhouses or for supplementing the school fund apportioned to said district. Tuition fees of pupils not entitled to free tuition, and funds from other local sources may also be used for building or maintenance purposes. Property belonging to a school district can not be sold without an order from the commissioners' court.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—All funds, lands, and other property heretofore set apart and appropriated for the support of the public schools, all the alternate sections of lands reserved by the State out of grants heretofore made, or that hereafter may be made to railroads or other corporations of any nature whatsoever, one-half of the public domain of the State, and all sums of money that may come to the State from the sale of any portion of the same, shall constitute a perpetual public school fund. The interest arising from the fund and the State taxes shall be the available school fund. The available school fund shall be distributed to the several counties according to the scholastic population.

Taxation.—One-fourth of the revenue derived from the State occupation taxes and a poll tax of \$1 on every male inhabitant 21 to 60 years of age shall be set apart annually for the benefit of public free schools; and in addition thereto there shall be levied and collected an annual ad valorem State tax of such an amount, not to exceed 20 cents on the \$100, as with the available school-fund income will be sufficient to maintain and support the public free schools for a period of not less than six months in each year; and the legislature may authorize the school districts to raise an additional ad valorem tax, to be levied and collected within such districts, for the further maintenance of the public schools in the erection of school buildings therein: *Provided*, That two-thirds of the taxpayers shall vote such tax, not to exceed in any one year 20 cents on the \$100; but this limitation does not apply to incorporated cities or towns constituting separate or independent school districts.

VERMONT. ^a

1. ORGANIZATION OF THE SYSTEM.

State superintendent—Examiner of teachers—School directors—Town superintendent—Truant officers.

State superintendent.—The general assembly shall elect at each biennial session a superintendent of education, who shall have general supervision of the public schools of the State, and shall devote his whole time to the duties of his office, which, in case of vacancy, shall be filled by the governor. His annual salary shall be \$2,000, with traveling expenses not to exceed \$600. His office shall be at the statehouse, and he may employ clerical assistance at an annual compensation of \$800. He is allowed \$400 a year for publishing educational circulars, besides necessary disbursements for postage, expressage, printing, stationery, etc.

He shall hold at least one but not more than two teachers' institutes or summer schools in each county during each biennial term, each such institute to continue not longer than four days, and each such teachers' summer school not longer than ten days. He may direct the examiner of teachers of a county to conduct the institute. In addition to the occasion of holding an institute, he shall visit annually each county and as many towns as possible, deliver lectures upon educational subjects, confer with and advise school officers and teachers. He shall prepare all questions for the examination of teachers, direct such examinations, and fix the standards of same; issue courses of study, circulars of educational information and prepare school registers, statistical blanks, etc.

He shall file quarterly a sworn itemized statement of his expenses, and present to the general assembly on the first day of each biennial session a report covering the two years last past, containing an account of his official doings, the condition of the schools, the expenditure of school money, and suggestions. Not more than 3,000 copies of such report shall be printed, 5 copies of which shall be sent to each examiner of teachers, and 1 copy each to members of the general assembly, town and district clerks, and principals of graded union and high schools.

Examiner of teachers.—At each biennial session of the legislature, or as soon as possible thereafter, the State superintendent and the governor shall appoint one resident of each county as examiner of teachers, who shall, under the direction of the State superintendent, make all necessary arrangements for holding teachers' institutes, assist in such institutes and also at summer schools, take measures to secure the attendance of teachers, and furnish statistical information. He shall hold public examinations of applicants for teachers' certificates, at such times and places as shall best accommodate the teachers of the county, and shall keep a complete record of the same. He shall receive \$4 a day while actually employed in official duty, together with not to exceed \$2 a day to cover necessary expenses, besides postage and stationery, and shall file an itemized and sworn statement of same every six months. He shall make a biennial report to the State superintendent, who, with the governor, may remove him for unfitness and fill any vacancy arising in the office.

School directors.—Three citizens of each town shall constitute a board of school directors, one of whom shall be elected at each annual meeting of the town for a term of three years; vacancies shall be filled temporarily by the selectmen. The compensation of school directors shall be fixed annually by the town.

School directors shall have the care of the town's school property and the management of its school; may purchase or sell sites and erect buildings, determining their number and location; shall keep schoolhouses suitably repaired and insured; employ teachers and fix their compensation by a majority vote; examine and allow claims arising therefrom, and draw orders upon the town treasurer for the payment of same; shall have authority to designate the schools which shall be attended by the various pupils, may provide for the instruction of advanced pupils, and make regulations not inconsistent with law for carrying the powers granted them into effect. They shall report fully to the annual town meeting.

Town superintendent.—The board of school directors shall, on or before the 1st day of April of each year, appoint a town superintendent of schools, whose

^a "The special provisions relating to incorporated school districts and school districts in unorganized towns and gores" are not included in this digest.

compensation they shall fix. His duty shall be to visit the schools of the town at least once each term, and oftener if the school board so directs. He shall observe, when visiting a school, the condition of the buildings and grounds, the number of the scholastic appliances, maps, text-books, etc., and make suggestions to the board. He may dismiss any incompetent teacher. In towns having a graded school district under special act, the town and the special district may unite in the election of a town superintendent. Any two or more towns the aggregate number of schools in all of which is not more than 60 nor fewer than 20, may, by vote of the school directors of the several towns, unite for the purpose of employing a superintendent of schools, the directors of the several towns forming a joint committee for the election of the superintendent and determining the proportion of his salary to be paid by each town.

Truant officers.—The selectmen of each town and the mayor of each city shall annually appoint two truant officers, or, in case of failure to appoint, the constables, sheriffs, deputy sheriffs, or policemen shall act as truant officers. The truant officer, or a member of the board of school directors, or other authorized person, may arrest, and upon the written application of three voters in the town shall arrest, a child who is illegally absent from school. Any person charged with the duty of arresting truants who shall refuse or neglect to perform the duty imposed by law shall be fined not exceeding \$100. All persons acting as truant officers shall be paid \$2 a day for time actually spent, unless otherwise provided. On complaint of a teacher to a school director the truant officer shall inquire into the cause of a pupil's absence, and if he have reason to believe that the pupil's parent, guardian, or master has violated the laws regarding attendance, the truant officer shall immediately make complaint to a justice of the peace or judge of the municipal court, who shall issue a warrant to have the parent, guardian, or master brought before him.

2. TEACHERS.

Certificates—Duties—Preliminary training—Institutes.

Certificates.—No person shall teach a public school without having a certificate or a permit, and a contract for teaching shall be void if the teacher does not obtain a certificate before opening school. No certificate will be granted to a person under 17 years of age. A certificate of graduation from the lower course of a normal school in the State shall be a license to teach in the public schools of the State for five years; from the higher course, ten years. A graduate of the lower course may, after one hundred weeks of successful teaching, present himself for examination in the studies of the higher course. A person who has held first-grade certificates for ten years and has taught two hundred weeks thereunder may, by concurrent action of the State superintendent and the county examiner, be granted, without examination, a certificate to teach in the public schools until same be revoked. A first-grade certificate, or a second-grade certificate granted on examination, held by a teacher who is employed continuously in the same school, shall remain in force during such continuous employment.

A graduate of a normal school in another State approved by the State superintendent may, upon presentation of a diploma or certificate of graduation, receive without examination from an examiner of teachers a first-grade certificate valid for five years from date of graduation, subject to the same provisions as certificates of graduation from a normal school in this State. A graduate of a college approved by the State superintendent may, upon presentation of a diploma or certificate of graduation to an examiner of teachers, receive without examination a certificate of the first grade; and after having taught successfully forty weeks such graduate may receive without examination a second first-grade certificate after the expiration of the first. A person who has held a first or second grade certificate or its equivalent in other States, and presents evidence of recent and successful experience in teaching, may, under the approval of the State superintendent, without examination, receive a special second-grade certificate which shall be valid until the next public examination, or for a term not exceeding one year, when in the judgment of the examiner the exigencies of the case require.

The examination shall be oral and written, and shall be conducted by the examiner or some competent person appointed by him from printed questions prepared by the State superintendent. Certificates, issued by the examiner on blanks furnished by State superintendent, are of three grades. A first-grade cer-

tificate shall be given only to one who has taught forty weeks successfully, whose examination papers show the applicant to have reached the standard required by the State superintendent, whose oral examination has been satisfactory, and who gives evidence of good moral character and ability to govern a school. Such certificate shall be a license to teach for five years in any town in the State. A second-grade certificate shall be granted to a candidate having taught twelve weeks, passed an examination in all the branches required by law to be taught in the common schools, proved by his papers that he has filled the requirements of the standard set by the State superintendent, and that he is of good moral character and capable of controlling a school. Such a certificate shall be a license to teach two years. A third-grade certificate shall be a license to teach for a specified time, not to exceed one year, and may, at the discretion of the examiner, be limited to the teaching of a particular school. One having twice taken a third-grade certificate, and who has taught at least twenty-four weeks, shall not afterwards be given a certificate of that grade. An examiner may give an applicant a private examination when the exigencies of the case require.

Teachers shall notify the clerk of the school board of the date, grade, and name of the grantor of their certificates before commencing school, and upon request shall submit same to his inspection. The contract of any teacher neglecting to comply with this provision shall be considered void.

Other duties.—Before commencing school the teacher shall secure a register from the clerk of the school board, keep therein in the prescribed form a record of the daily attendance of each pupil, enter therein correct answers to all interrogatories addressed to teachers, and return such register to said clerk at the end of each term, the final return to be on or before April 1. Teachers shall promptly notify school directors of any cases of truancy in their respective schools.

Preliminary training.—The normal schools at Randolph, Johnson, and Castleton are continued until August, A. D. 1920. The board of control for the three State normal schools consists of the State superintendent of education; a commission of three persons, one appointed each year by the governor for a term of three years; and a resident commissioner for each of the schools, appointed biennially by the governor. Members of the commission appointed by the governor, except the resident commissioner, shall receive \$4 a day each and their traveling expenses for the time spent in the performance of their duties. Resident commissioners receive compensation for their traveling expenses when in discharge of their duties.

The board of control have the care of the three normal and training schools; they establish courses of study and revise the same when necessary; determine the conditions for admission to and for graduation from the normal schools; provide for the issue of certificates to teach to all persons of good moral character who may pass the examinations required for graduation, and may revoke the same for good and sufficient reasons; select and employ all teachers for the normal and training schools, and dismiss them when the interests of the school demand it.

The board, by their treasurer, receive all moneys appropriated from the State treasury for the support of the schools, and all moneys accruing to the schools from other sources, and apply the same in their discretion for the benefit of the schools. Eighteen thousand dollars is annually appropriated, in three equal parts, for the use of the schools.

A graduate of an academy, seminary, or high school in a four years' course, following an elementary course of nine years, approved in writing by the board of normal school commissioners, and having included at least thirty weeks of daily study and recitation in the principles and methods of education, definitely outlined by the State superintendent of education, may receive, after successfully passing an examination in the educational course herein described, under the direction of the normal school commissioners, a certificate of the second grade from the examiner of the county in which he intends to teach, upon the presentation of both a certificate of graduation and a certificate of the completion of the educational course from the board of normal school commissioners.

Institutes.—The State superintendent shall hold a teachers' institute in each county during each biennial term except as hereinafter provided, and may hold additional institutes if in his judgment advisable; but not more than two institutes shall be held in any county during a biennial term, nor shall an institute continue more than four days. Provided no institute is held in a county dur-

ing any year, the superintendent of education and examiners of teachers may arrange for and conduct a summer school for teachers, the expense of which to the State shall not exceed \$25 per day for not more than ten days, and the examiner may receive from the State compensation for not more than ten days for his services in connection with such summer school. Provided no institute or summer school is held in a county during any year, he may hold educational meetings in different towns in such county and employ competent assistance, but the expense per day shall not exceed the present allowance per day for institutes or summer schools; and the entire expense of such series of meetings in a county for any year shall not exceed the present allowance for institutes or summer schools, which shall be paid by the superintendent of education and be allowed in the settlement of his account.

In every teachers' institute especial attention shall be given to the training of teachers in methods of instruction; and the superintendent of education may employ persons specially skilled in such work to aid at an institute when advisable to do so.

The entire expense of a teachers' institute shall not exceed \$30 for each day's session, which shall be paid by the superintendent of education and be allowed in the settlement of his account.

The time, not exceeding four days, actually spent by the teacher of a common school in attendance upon a teachers' institute or State teachers' association during the time such teacher is engaged to teach shall be considered as spent in teaching, nor shall legal holidays be considered as days lost.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—The term "legal pupils" shall include all persons between the ages of 5 and 18 years. No child under 5 years of age shall be received as a pupil, though school directors may establish a public kindergarten for such. Every person having under his control a child of good health and sound mind between 8 and 15 years of age shall cause it to attend a public school at least twenty-eight weeks in the year, unless such child has been otherwise furnished with the means of education for a like period or has already acquired the branches of study required by law to be taught in the public schools. No child under 15 years of age shall be employed in a mill or factory unless such child shall have attended a public school twenty-eight weeks during the preceding year, and shall deposit with the owner or person in charge of such mill or factory a certificate showing such attendance, signed by the teacher. No person shall employ children under 15 years of age who can not read and write, though capable of receiving instruction in those arts, during the time when the school such person should attend is in session. The penalty for violation of these provisions is not less than \$5 nor more than \$25, to be adjudged by any justice of the peace.

The board of school directors may use a portion of the school money for the purpose of conveying pupils to and from school.

Character of instruction.—In every town there shall be kept for at least twenty-eight weeks in each year, at the expense of the town, by a competent teacher or teachers of good morals, a sufficient number of schools for the instruction of all the children who may legally attend the public schools therein, and all pupils shall be thoroughly instructed in good behavior, reading, writing, spelling, English grammar, geography, arithmetic, free-hand drawing, the history and the Constitution of the United States, and in elementary physiology and hygiene, and shall receive special instruction in the geography, history, constitution, and principles of the government of Vermont. Said school shall be within the limits of the town supporting it, and may be established at such places and held at such times as in the judgment of the board of directors will best subserve the interests of education and give all the children of the town as nearly equal advantages as may be practicable. Directors shall provide for the instruction of advanced pupils in the higher branches of study, in high schools maintained by the town or in high schools or academies of other towns or districts. Vocal music may be taught if allowed by vote of the town. Boards of directors may also establish evening schools and kindergartens.

Text-books.—The school board of each town, city, or graded school district shall furnish at public expense all appliances, supplies, and text-books used in

the studies enumerated in the preceding paragraph (Character of instruction), and may furnish text-books on secondary school subjects.

Buildings.—Towns shall provide and maintain suitable schoolhouses, and the location, construction, and sale of the same shall be under the control of the board of school directors.

Local boards of health shall make, under the direction of the State board, a sanitary survey of each schoolhouse and report the same to the State board. The said local boards shall report at each March meeting to the voters of their towns the sanitary conditions of the schoolhouses. All schoolhouses shall be constructed, in respect to lighting, heating, ventilation, and other sanitary arrangements, according to regulations furnished by the State board of health.

A person who willfully and maliciously injures or defaces a dwelling house or other building shall be fined not more than \$20 and be liable to the owner in action at law. A person who carelessly and without malice injures or defaces any part of a building belonging to a town or county or the appurtenances thereof of any kind, including trees and shrubbery, or fastens a horse or other animal to any such appurtenance, or posts bills, etc., whereby any defacement results, shall forfeit \$2 to the State.

No barbed-wire fence shall be used to inclose school grounds.

4. FINANCES.

Funds (permanent or special)—Taxation.

United States deposit money.—The treasurer of the State shall receive moneys belonging to the United States to be deposited with this State. Such moneys shall be apportioned to the several towns, organized or unorganized, and to the gores in proportion to the number of inhabitants in each, according to the last State or national census. The town trustees of the public money may loan the same for one year to the town or to private individuals at an annual interest of 6 per cent. When there are no town trustees of public funds the State treasurer acts. The treasurer of each town shall give credit in his account of the school fund for all sums received by him as income from the town share of the deposit money, and this income shall be annually appropriated to the support of schools in the town; but if a town has other school funds the income of which is sufficient to support schools in such town for six months of the year, such town may appropriate the income received from its share of such money to any purpose. Failure to comply with the foregoing provisions makes the town liable to the county in a sum not exceeding double the interest on such moneys, and the grand jury shall inquire into the management and disposition of this fund.

Huntington fund.—The State treasurer shall annually apportion the interest, at 6 per cent, on the amount of the Huntington fund (\$211,131.46) to the several towns in proportion to the number of inhabitants.

Town school fund.—The selectmen of a town shall have charge of the real and personal estate in such town appropriated as a fund to the use of schools unless otherwise provided by law or the donor. They shall lease lands and loan moneys on annual or semiannual interest secured by real estate.

State tax.—A tax of 8 cents on the dollar shall be annually assessed on the list^a of polls and ratable estate of the inhabitants of this State for the support of common schools. The treasurer shall annually apportion to the several towns and cities and unorganized districts the proceeds of such tax, according to the number of legal schools maintained during the preceding school year.

Local tax.—The school directors of each town shall annually, in writing, recommend to the selectmen of their town the amount of money necessary for the use of schools, and said selectmen shall annually appropriate for such purpose a sum not exceeding one-half nor less than one-fifth of the grand list of such town, and shall assess a tax annually to defray such appropriations. Any town by special vote may raise a larger sum for school purposes.

^a This "grand list" of Vermont is made up of the polls and 1 per cent of the assessed value of real and personal property. Eight per cent of this "grand list" is taken, as related in the text.

VIRGINIA.

1. ORGANIZATION OF THE SYSTEM.

State board—State superintendent—County school board—County superintendent—District school board—City school board—City superintendent.

State board.—The State board of education shall be a corporation consisting of the governor, attorney-general, superintendent of public instruction, and three experienced educators elected quadrennially by the senate from a list consisting of one from each of the faculties and nominated by the respective boards of visitors or trustees of the State university, the military institute, the polytechnic institute, the State female normal college, the school for the deaf and the blind, and the College of William and Mary (State male normal school), together with two division superintendents (one from a county and one from a city), selected every two years by the six members named above. [The last two members have all the powers of other members except participation in the appointment of public school officers.]

They shall divide the State into appropriate school divisions comprising not less than one county or city each, and appoint (for four years), subject to confirmation by the senate, one superintendent of schools for each division; discipline and remove superintendents; prescribe the duties of the State superintendent; approve employees for the office of the State superintendent and nominated by him, the first clerk to serve as secretary of the board at an extra compensation; make rules for their own government and for the management and conduct of the schools; provide for examining teachers by the appointment of a State board of examiners or by such other plan as may be deemed expedient; select text-books and educational appliances; guard against the multiplying of schools to the detriment of the grade of instruction; approve plans of the State superintendent for the organization and conduct of summer normal schools and audit the accounts of expenses thereof; encourage teachers' meetings; decide appeals from decisions of State superintendent; order a vote in counties or districts on matters so referable by law; invest the capital and surplus income of the literary fund, recover any money belonging thereto, and audit claims to be paid therefrom; approve schemes of the State superintendent for apportioning State school money; determine contingent expenses of the State superintendent's office; appoint board of directors to manage State library; observe operations of school system and regulate matters in administration thereof not provided for; suggest to the general assembly improvements in system, and make report to said assembly, including the report of the State superintendent.

State superintendent.—A superintendent of public instruction, who shall be an experienced educator, shall be elected by the qualified voters of the State every four years. He shall be the chief executive of the public free school system and ex officio president of State board, and shall see that the laws relating thereto are enforced, explain them to public school officers, prepare suitable registers, blank books, and forms for the transacting of the school business, and by circulars and otherwise give instruction to those who have educational duties to perform. He may require special reports from any officer, and may appoint persons (without compensation) to examine the schools of the county in which such person resides. He shall inspect the public schools as often as is consistent with his other duties; decide all appeals from decisions of county superintendents; select the time and place of holding summer normal schools; prescribe the course of instruction therein and select instructors therefor; issue State certificates; preserve all books, apparatus, maps, etc., received by him; prepare a scheme for apportioning the money appropriated by the State for the schools among the several counties and cities on a basis of the number of children from 7 to 20 years; provide a seal, and annually report to the board concerning his official acts, including a plain statistical account of receipts and expenditures, and other duties required of him by law.

County school boards.—The county superintendent of schools, together with the district school trustees in each county, shall constitute a body corporate. It shall hold a regular annual meeting, make and record rules for its own government, may appoint a clerk at \$2 a day of actual service, prepare an estimate of the amount of money needed for the public schools and (after careful revision of the estimates of the district boards) separately prepare estimates of the expenses of schools in each school district; make annual settlements of school

funds with county treasurer; manage or examine into the management of all property belonging to the county schools, and report annually to the State superintendent.

County superintendent.^a—The county superintendent of schools shall be appointed by the State board for four years, at a compensation of \$30 for every 1,000 of population for the first 10,000, \$20 for every 1,000 in excess of 10,000, up to and including 30,000, and \$10 for every 1,000 in excess of 30,000, rejecting in each case fractions less than 500: *Provided*, The compensation shall not be less than \$200 a year, to be paid out of the bulk of the State school funds as distinguished from the appropriations from the same to the several counties. His duties shall be as follows: To explain the school system upon all suitable occasions and promote a desire for education; prepare a scheme for apportioning the State and county school funds among the school districts; examine persons desiring to teach; issue licenses, and promote the efficiency of the teaching force; assist in the organization of the district school trustees at their sessions (without the right to vote); examine all the schools as to their management, course of study, methods, discipline, and text-books, the condition of the school-houses, and the records and official papers of the school districts; decide finally all complaints or appeals concerning the acts of persons connected with the school system; administer oaths and take testimony whenever required in cases coming before himself or the State superintendent; keep a record of his official acts; make special reports to the State superintendent when required to do so, obey his instructions, and make an annual report to him, on penalty of forfeiting the last quarter of his annual pay.

District board of school trustees.—School districts shall correspond with the magisterial districts except that towns of 500 or more may elect to form a separate district. Subdistricts may also be formed or abolished.

The judge,^b Commonwealth's attorney, and school superintendent of each county shall be a board to be known as the school trustee electoral board, which shall have power (except in case of municipal councils which appoint their own boards) to appoint district boards of school trustees of 3 each for terms of three years, 1 retiring annually, each of whom shall be a resident of the school district, and shall continue so during his term or relinquish his place, and no supervisor or county treasurer is qualified. The duties of the board of trustees are as follows: To explain and enforce the school laws; employ and dismiss teachers; suspend or dismiss pupils; decide what children shall, by reason of poverty, be furnished text-books free; see that the school census (persons 7 to 20 years) is taken properly every five years; the district board shall call meetings of the people of the district; prepare and present to the county school board an estimate of the money needed for maintaining the public schools, including buildings and text-books for the children of indigent persons; care for, add to, and manage the school property of the district, and permit the use of an unoccupied public schoolhouse (vacant from lack of funds to maintain it) by a person not employed by the board but who desires to teach; report annually to the county superintendent; visit the schools within the district, and see that they are carried on in accordance with law.

The clerk of the district school board shall every five years take a census of the persons (7 to 20 years) residing in the district, receiving compensation at the rate of \$3 for every 100 persons enumerated, and perform other duties as may be required by the board, for which he shall be paid \$2 per day of actual service.

City school board.—All the school trustees in a city shall constitute a single corporation, which shall have the same officers, powers, and duties as ordinary boards of district school trustees except as otherwise provided. This board shall have power, subject to the common council, to prescribe the number and boundaries of school districts and the number of trustees (not exceeding three from each district); but until such arrangement is made every city not divided into wards shall be one school district, and cities divided into wards shall have as many districts as there are wards. Each trustee is appointed for three years, 1 in each district retiring annually. The city board may establish high and normal schools.

City superintendent.—In every city of 10,000 or more inhabitants there shall

^aAfter July 1, 1905, the State board will divide the State into school divisions by combining counties, etc. Local superintendents will thereafter be known as division superintendents.

^bThe office of county judge has been abolished—effective February 1, 1904.

be a superintendent of schools, appointed by the board of education of the city and paid by the State, though the amount thus paid may be increased by municipal action. Whenever the population of a county in which a city of less than 10,000 inhabitants is located contains 15,000, exclusive of the population of the city, that city may have a superintendent separate from the county, under the conditions obtaining in the case of cities of 10,000 or more. The city superintendent may teach ex officio when requested by the board, may suspend or dismiss pupils, with appeal to city school board, and shall participate in the sessions of the board, but shall have no vote. (See also County superintendent.)

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings—Summer normals.

Appointment, qualifications, and duties.—No teacher of a free public school shall be employed or paid from public funds unless holding a certificate of qualification in full force from the county or State superintendent. If payment is made for the services of a person unqualified, the payment shall be disallowed, and the officer who sanctioned it shall be fined not less than \$5 nor more than \$50. Written contracts must be made in duplicate before installment.

The county superintendent shall examine persons applying for license to teach in the free public schools, and, if satisfied as to their capacity, acquirements, morals, and general fitness, he shall grant them certificates of limited duration subject to revocation, all under the supervision of the State superintendent. He shall also hold examinations for those desiring to teach in his county for the school year, at such time and place as may be required by a district board. Examinations will be held in orthography, reading, writing, arithmetic, grammar, geography, physiology, and hygiene, and, for a first or second grade certificate, in the theory and practice of teaching. Applicants to teach school in which the higher branches have been introduced must be examined upon those branches also. The first-grade certificate entitles to teach three years, and may be renewed for two years or shorter period; the second grade is good for two years, and the third grade for one. Holders of first-grade certificates may receive from county superintendents professional certificates good for seven years, and renewable by passing the prescribed examination.

The State superintendent shall issue two grades of State certificates—one valid for seven years (the "professional certificate") and the other for life (the "life diploma"). To obtain either of these the applicant must pass in the subjects required for a first-class county certificate and such other subjects as the State superintendent may demand, and have taught school two years or more, and satisfy the superintendent of his ability to teach and manage a school. The State superintendent issues State normal certificate to graduates of the State normal schools, also issues State certificates to graduates of colleges and universities who have taught in this State three years on first-grade certificates.

Every teacher shall keep a daily register of facts pertaining to his school and be responsible for it until delivered to the clerk of the school district, may suspend pupils until the case is decided by the board, is exempted from working on roads, nor shall the salary received be governed by the daily average attendance, if more than 10.

Preliminary training.—There are four normal schools—one for white men, one for white women, and two for colored persons. The object of the Hampton Normal School, as set forth in the charter, is to "instruct youth in the various common school, academic, and collegiate branches, the best methods of teaching the same, and the best mode of practical industry in its application to agriculture and the mechanic arts." The other school for colored persons is known as the Virginia Normal and Industrial Institute, having a normal department, and an industrial department, and such other departments as may be expedient. It is managed by a board of four qualified persons (appointed by the governor) and the State superintendent.

The State female normal school is expressly for the training and education of white women for teachers in the public schools. It is under a board of trustees, of whom the State superintendent is one. The trustees may grant diplomas and certificates of proficiency to its graduates and pupils. Each city and county is entitled to send one pupil and one additional for each repre-

sentative in the house of delegates above one. Each pupil is required to give satisfactory evidence of an intention to teach in the schools of the State for at least two years.

The college of William and Mary is authorized to establish, in connection with its collegiate course, a system of normal instruction and training for the purpose of educating and training white men for teaching for the public schools. It is governed by a board of 21 visitors, 10 of whom are appointed by the governor, with the State superintendent an ex officio member, who prescribe rules for the examination of those applying for normal instruction, and require satisfactory assurance from each pupil that it is his intention to teach at least two years in the public schools, and each pupil shall have the privilege of the college course without charge. Each county and city in the State shall be entitled to one pupil, who shall be nominated by the county superintendent, and one additional pupil for each additional representative in the house of delegates.

Fifty young men, between 16 and 25 years of age, residents of the State, are admitted to the Virginia Military Institute as State cadets, board and tuition free of charge, in consideration of which they are required to teach in some school in the State for two years. Bond is required to cover board and tuition until the fulfillment of this obligation.

For the purpose of establishing an intermediate grade of instruction between that of the common school and that of the college, any district school board, with the consent of the county school board, may admit branches necessary to qualify pupils to become teachers.

Meetings.—The State board of education shall have power at its discretion to invite and encourage meetings of teachers at convenient places, and to procure addresses to be made touching the processes of school organization, discipline, and instruction; provided that no public money shall be expended for the purpose, and that no meeting shall be held during the time the schools should be open, nor shall any teacher be paid for attendance or be compelled to attend.

Summer normals.—The sum of \$2,500 is annually appropriated for the support and maintenance of summer normal schools, to be conducted, under the management of the State board, at such times and places as the State superintendent may select. The purpose of such schools is to familiarize teachers with more advanced methods of teaching and to furnish such additional academic training as will tend to promote the usefulness of the public schools. Summer schools for colored teachers are provided from this appropriation, and the faculty of the Virginia Normal and Industrial Institute conduct a summer school four weeks annually for colored teachers.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—White and colored children must be taught in different schools. The school age is 7 to 20, but persons 20 to 25 may be admitted on payment of tuition fees. Pupils must be vaccinated. An enrollment of at least 20 pupils, with a reasonable assurance of an average attendance of that number, shall be required to constitute a free public school, but in cases where this would work hardship the county superintendent may allow 15, and in case of a factious spirit on the part of one or a few persons which tends to reduce the attendance below the minimum the school may be kept open.

Character of instruction.—In every public free school shall be taught orthography, reading, writing, arithmetic, grammar, geography, history of the United States and of Virginia, physiology and hygiene, and the State superintendent may introduce civil government and drawing. (But see below in regard to intermediary instruction.) In schools having not less than 40 pupils, with an average attendance of 30, at least two teachers shall be employed the whole time, one of whom shall be devoted to instruction in elementary branches; and in all localities where the number of children is sufficient preference shall be given to graded schools—schools in which the pupils are taught in different rooms by different teachers, according to advancement in the studies of the one-teacher school. To encourage an intermediate grade of instruction school boards of districts, when the county board has consented, may admit instruction in any branches necessary to qualify pupils for teaching in the public schools or to enter any of the colleges or higher institutions of the State; but a fee may be required, not exceeding \$2.50 a month, for each pupil, and schools having but

one teacher and a daily session of five hours shall be confined to the elementary branches.

Text-books.—The State board shall select text-books, exercising its discretion as to books suitable for cities and counties, respectively. No book (except United States histories) may be changed inside four years. District boards shall decide what pupils shall be entitled to receive text-books free of charge owing to the poverty of their parents.

Buildings.—The board of school trustees shall provide suitable schoolhouses, with proper furniture and appliances, in every district, and may hire, erect, or purchase such houses, observing the utmost economy consistent with health and decency, after consultation with the county or city superintendent as to the style of architecture and the arrangements of the buildings and grounds. Unsanitary buildings may be condemned by county superintendents. An unused building may be occupied by a person who desires to open a school, except when school funds are at hand to keep it open as a public school. To disturb any exercise of a school is a misdemeanor, subject to a fine of not less than \$10 or more than \$50, and, in the discretion of the court, confinement in jail for not more than thirty days.

4. FINANCES.

Funds (permanent or special)—Taxation.

The funds applicable annually to the establishment, support, and maintenance of free public schools shall be as follows:

State funds, embracing the annual interest on the literary fund (arising from the sale of public lands, forfeited property, and fines for offenses against the State), a capitation tax not exceeding \$1 per annum on every male citizen of age, and such tax on property, not less than 1 mill nor more than 5 mills on the dollar, as the general assembly shall order.

County funds, embracing such taxes as shall be levied by the board of supervisors, fines imposed upon school officers, and donations.

District funds, embracing such taxes as shall be levied by the board of supervisors of the county, not to exceed 10 cents on the hundred dollars, for the purposes of the school district, and donations. [The county and district tax together shall not exceed 20 cents on the hundred dollars.]

Municipal funds, embracing such taxes, property, and capitation as may be levied by the city or town councils, or such appropriations as they may make, not exceeding 3 mills on the dollar in any year.

WASHINGTON.

1. ORGANIZATION.

State board—State superintendent—County superintendent—District board—City board.

State board.—The governor shall appoint, by and with the advice and consent of the senate, four suitable persons holding life diplomas, at least two of whom shall be selected from those actually engaged in teaching in the common schools of the State, who, together with the superintendent of public instruction, shall constitute the State board of education. The persons appointed shall hold their office for two years. The board shall hold an annual session at the capital and necessary special meetings. The members shall be paid for their services at the rate of \$5 per diem of actual service, and shall be reimbursed for necessary traveling expenses; but the expenses of the board shall not exceed \$1,000 in any one year. (See also Teachers—Appointment, qualifications, and duties; Schools—Character of instruction, Text-books.)

State superintendent.—There shall be elected by the qualified electors in the State, for a term of four years, a State superintendent of public instruction. His salary shall be \$2,500. He shall have supervision over all matters pertaining to the common schools, shall report to the governor biennially, said report, of which 4,000 copies shall be printed, to contain a statement of the general condition of the common schools of the State, with full statistical tables, by counties, showing the number of schools and the attendance; the State and

county school fund apportioned; amount received from special tax or other sources, amount expended for salaries of teachers, the salaries paid by the several counties to the superintendent of schools, the amount they are paid for visiting schools, and their mileage; the amount expended for building and providing schoolhouses; the amount of bonded or other school indebtedness, with rate of interest paid; the reports of all State educational institutions, or such portions of them as he may think advisable, together with such other facts as he may deem of general interest. He shall also include in his report a statement of plans for the management and improvement of the schools. He shall prepare and superintend the printing and distribution to county superintendents of such blanks, forms, registers, blank books, and copies of the school law as may be necessary to the proper discharge of the duties of county superintendents, teachers, and all other school officers charged with the administration of the laws relating to common schools; also the rules and regulations for the use and government of the common schools, and the questions prepared for the examination of teachers. He shall, as far as possible, travel in the different counties of the State where common schools are taught, without neglecting his other official duties, for the purpose of visiting schools, consulting the county superintendents, and addressing public assemblages on subjects pertaining to common schools; also to open such correspondence as may enable him to obtain all necessary information relating to the system of common schools in other States. His traveling expenses and the actual amount expended for postage, stationery, and other expenses of his office at the capitol (in which he shall preserve the records of his office) shall be paid as are the incidental expenses of other State officers.

He shall be *ex officio* president of the board of education. He shall, annually, on or before the 1st day of October, call a convention of county superintendents of this State, at such time and place as he may deem most convenient, for the discussion of questions pertaining to the supervision and administration of the school laws, and such other subjects affecting the welfare and interests of the common schools as may be properly brought before it. He shall, quarterly, apportion the State common school funds subject to apportionment among the several counties of the State, in proportion to the total days' attendance (provided that each school district shall be credited with 2,000 days' attendance), according to the last annual reports of the several county superintendents on file in his office at the time of making the apportionment. The attendance of a pupil in a school outside the resident district shall be credited to the resident district unless otherwise arranged between the districts or schools. He shall certify said apportionment to the State auditor, and upon said certification the State auditor shall draw his warrant on the State treasurer in favor of the county treasurer of each county for the amount apportioned to said county, and transmit the same to the several county treasurers. The superintendent of public instruction shall also certify to the county superintendent of schools of each county the amount apportioned to that county. It shall be the duty of the State auditor to notify the superintendent of public instruction of the amount of the State common school fund subject to apportionment. He shall, annually, on or before the 15th day of August, require of the president, manager, or principal of every seminary, academy, and private school, and of the president, principal, or manager of every State educational institution in this State, a report of such facts, arranged in such forms as he may prescribe; and he shall furnish blanks for such reports, and it is made the duty of every such president, manager, or principal to fill up and return such blanks within such time as the State superintendent may require. He shall keep a directory of the boards of regents and trustees of State educational institutions, of the faculties of said institutions, and of all teachers receiving certificates to teach in the common schools of the State. He may appoint a stenographer, a deputy superintendent, and such other assistants as the needs of his office may require (about \$4,000 a year allowed for this purpose).

County superintendent.—A county superintendent of common schools shall be elected in each county every two years, and shall give bond. Vacancies shall be filled by the county commissioners. The superintendent may appoint a deputy and other necessary clerical assistants, but in counties having less than 100 districts such shall be at superintendent's own expense. He shall exercise a careful supervision over the common schools, visiting each at least once a year; distribute promptly all reports, laws, forms, circulars, and instructions received from the State superintendent; enforce the course of study adopted by the State board; preserve all reports made to him, and keep a record of the teachers, with all personal and pedagogical data; make an annual report to the State

superintendent, containing abstracts of the reports made to him by district clerks, and such other matters as the State superintendent may require; keep an accurate description of the boundaries of the several districts; appoint district directors to fill vacancies and form new districts; apportion the county school funds (amount received from the State, county taxes, fines, etc.) to each district according to the number of days' attendance: *Provided*, That each district shall be credited with at least two thousand days' attendance. He shall report to the county commissioners the number and names of defective youth in his county, and the county commissioners shall not allow his salary for July until the State superintendent shall certify that his annual report has been made.

Any decision made by the county superintendent may be appealed to the State superintendent. The county superintendent, in addition to the salary fixed by law, shall be allowed mileage at the rate of 10 cents for each mile necessarily traveled in visiting schools and in attending conventions of county superintendents, but he shall be allowed no other emolument.

Board of district directors.—The term "school district" means the territory under the jurisdiction of a single school board. To organize a new district a petition in writing shall be made to the county superintendent signed by at least five heads of families residing in the district, but for the purpose of transferring territory from one district to another it is necessary that a majority of the heads of the families residing in the territory to be transferred should petition.

Directors of school districts shall be elected at the regular annual school election. At the first annual election in all new districts three directors shall be elected for one, two, and three years, respectively. The ballots shall specify the term for which each is to be elected. In all districts in which elections have been previously held, one director shall be elected for the term of three years, and if any vacancies are to be filled, a sufficient number to fill them for the unexpired term or terms; and the ballots shall specify the respective term for which each director is to be elected.

Every board of directors, unless otherwise specially provided by law, shall employ, and for sufficient cause discharge, teachers, mechanics, or laborers, and fix, alter, allow, and order paid their salaries and compensation; enforce the rules and regulations prescribed by the superintendent of public instruction and the State board of education for the government of the schools, pupils, and teachers, and enforce the course of study prescribed by the State board of education; provide and pay for school furniture and apparatus, and such other articles, materials, and supplies as may be necessary for the use of schools; rent, repair, furnish, and insure schoolhouses; build or remove schoolhouses; purchase or sell lots or other real estate, when directed by a vote of the district to do so; purchase personal property in the name of the district, and receive, lease, and hold for their district any real or personal property, and have custody of all school property; suspend or expel pupils from school who refuse to obey the rules thereof, and may exclude from school all children under 6 years of age; provide free text-books and supplies, to be loaned to the pupils of the schools, when in their judgment the best interests of their districts will be subserved thereby; require all pupils to be furnished with such books as may have been adopted by the State board of education, as a condition to membership in the schools; exclude from school and school libraries all books, tracts, papers, and other publications of an immoral or pernicious tendency, or of a sectarian or partisan character; provide and pay for transportation of children to and from school when deemed necessary; authorize the schoolroom to be used for summer and night schools, literary, scientific, religious, political, mechanical, or agricultural societies, under proper regulations; require teachers to conform to the provisions of the school law.

Any board of directors shall be liable as directors in the name of the district for any judgment against the district, for any salary due any teacher, and for any debts legally due, contracted under the provisions of this act, and they shall pay such judgment or liability out of the school funds to the credit of the district.

The directors shall annually elect one of their number clerk and as such clerk he shall annually take an exact census of all children and youth between the ages of 5 and 21 years, and shall designate the number of weeks each child between the ages of 6 and 21 years has attended school during the school year, the names and sex of all children subject to enumeration, noting defects of sight or hearing, and the names of their parents or guardians. He shall report the enumeration, and such information as the State superintendent shall require as to duration of schools, character of instruction, attendance, buildings, and

the salaries of teachers. He shall receive \$3 per diem for taking the census and making his report, and such other allowances as the board of directors may deem reasonable, but he shall receive no compensation until he shall have made his reports.

Each incorporated city or town shall comprise one school district, and shall elect, when there is more than one school, a town school superintendent, who may be a teacher.

City board of education.—Whenever any incorporated city shall have a population of 10,000 or more inhabitants, together with any adjacent or contiguous territory that now is or may be hereafter attached to said city for school purposes, it shall constitute one school district, and the board of directors shall constitute the city board of education. The board of directors shall consist of five members, who shall be elected by ballot by the qualified electors of the district, and shall hold their offices for the term of three years, and until their successors are elected and qualified. The regular district election for the election of members of the board of education shall be held annually in each district.

The board shall elect a secretary, who shall not be a member of the board, but shall act as its purchasing agent and in addition as superintendent of buildings, giving bond of \$5,000 or more. The board shall employ a city superintendent of schools of the district, and for cause dismiss him, and fix his duties and compensation; enforce the rules and general regulations of the State superintendent and the State board of education; prescribe the course of study, the exercises, and the kind of text-books to be used, in addition to the text-books prescribed by the State board of education, for use of the common schools of this State; provide free text-books and supplies for all children attending school when so ordered by a vote of the electors; or, if free text-books are not provided, provide books for indigent children, on the written statement of the superintendent that the parents of such children are not able to purchase them; require successful vaccination as a condition of school membership, and provide free vaccination for all who are unable to pay for the same; provide for school furniture and for everything needed in the schoolhouses; make necessary by-laws for more effectively carrying out the provisions of this act and for facilitating the work of the board, as required by law; adopt and enforce such rules and regulations as may be deemed essential to the well-being of the schools, and establish and maintain such grades and departments, including night schools, as shall, in the judgment of the board, best promote the interests of education in the district; suspend or expel pupils from school who refuse to obey the rules; employ, and for cause dismiss, teachers; determine the length of time over and above eight months that school shall be maintained; fix the time for the annual opening and closing of schools and for the daily dismissal of primary pupils before the regular time for closing schools. They shall make an annual printed report to the taxpayers of the district, showing in detail the receipts and disbursements of the school funds. The board shall annually cause the school census to be taken by the secretary and census marshals selected by him, at such compensation as the board shall fix, and shall annually report to the county commissioners the amount of funds necessary to carry on the schools.

2. TEACHERS.

Certificates—Duties—Preliminary training—Institutes.

Certificates.—No person shall be accounted a qualified teacher who has not first received a certificate issued by the State superintendent, or a State certificate or life diploma from the State board of education, or a temporary or special certificate granted by the county superintendent.

Life diplomas, valid during the life of the holder, and State certificates, for five years, shall be issued by the State superintendent on authority of the State board. State certificates may, upon application and without examination, be renewed, or a life diploma be authorized in lieu thereof by the State board.

First-grade common school certificates are valid for five years; second grade, for two years; third grade, for one year. Said certificates shall be issued by the State superintendent.

Temporary certificates may be issued by any county superintendent, entitling the holder to teach in any common school of the county wherein the same is issued until the next regular examination of teachers. Special certificates may be issued without examination by the county superintendent to teachers of music, languages other than English, drawing and painting, manual training, and

penmanship, upon application of any board of directors, if the county superintendent shall have received satisfactory evidence of the applicant's fitness to teach the subject named, which certificate shall entitle the holder to teach the subject therein named in any school of the district under the control of said board of directors, until revoked for cause.

The State board of education shall sit as a board of examination at their annual or special meetings and grant State certificates or life diplomas. State certificates shall be granted to such applicants only as shall file with the board satisfactory evidence of having taught successfully twenty-seven months, at least nine of which shall have been in the public schools of this State. The applicant must pass a satisfactory examination in all the branches required for first-grade common school certificates, also plane geometry, geology, botany, zoology, civil government, psychology, history of education, bookkeeping, composition, and general history, or shall file with the board a certified copy of a diploma from some State normal school or a State or Territorial certificate, the requirements to obtain which shall not have been less than those of this State. Life diplomas shall be granted to such applicants only as shall file with the board satisfactory evidence that they have taught successfully for ninety months, not less than fifteen of which shall have been in the public schools of this State; in other respects the requirements shall be the same as those for State certificates. But no State certificate or life diploma shall ever be granted without examination to the holder of a diploma from any State normal school unless said school shall first have been placed on the accredited list by the State board, nor shall a State certificate or a life diploma be granted without examination to the holder of a State certificate or life diploma unless the name of said State shall be found on the accredited list of States. The fee for State certificates shall be \$3 and for life diplomas \$5.

The State board shall also have power to grant State certificates without examination to all applicants who are graduates of a regular four-year collegiate course of the University of Washington, the Agricultural College and School of Science, or of other reputable institutions of learning whose requirements for graduation are equal to the requirements of the University of Washington. The applicant shall file with the board a certified copy of his diploma and the course of study for the year in which he graduated, and shall pass a satisfactory examination before the State board in theory and practice of teaching, psychology, and history of education, and shall file with the board satisfactory evidence of having taught successfully for twenty-seven months, at least nine of which shall have been in the public schools of this State, unless the name of the institution by which it was granted shall appear upon the accredited list of schools.

There shall be held at each county seat on the second Thursday of May, August, and November each year an examination of applicants for teachers' certificates, conducted by the county superintendent according to the rules and regulations of the State board. Applicants shall be at least 17 years of age, and shall be examined in reading, penmanship, orthography, written and mental arithmetic, geography, English grammar, physiology and hygiene, history and Constitution of the United States, school law and the constitution of the State of Washington, and the theory and art of teaching; and for a first-grade certificate in the additional branches of physics, English literature, and algebra, and the applicant must present satisfactory written evidence of having taught successfully nine months; but the State board may adopt two other subjects in lieu of algebra and physics for teachers who have taught exclusively in primary schools for not less than fifty months, and the certificates granted to such primary teachers shall be known as first-grade primary certificates, and shall entitle the holder to teach only in the primary grades of city and village schools. The State superintendent shall also have power to grant common school certificates without examination to all applicants who are graduates of a regular four-year collegiate course of the University of Washington, the Agricultural College and School of Science, State normal schools equal in requirements to the State normal schools of Washington, or of other reputable institutions of learning whose requirements for graduation are equal to the requirements of the University of Washington; also to all applicants who hold State certificates or diplomas equal in requirements to those of the State of Washington; but the applicant shall pass an examination in State school law and constitution with a standing required for a first-grade certificate.

Fee for examination or temporary certificate or renewal, \$1. The county superintendent shall, within three days of the close of said examination, forward to the State superintendent all the papers written at said examination

and relating thereto, including a complete list of all applicants, with their post-office addresses, and also a receipt from the county treasurer for the fees collected at the examination.

The holder of a first-grade certificate who shall present to the State superintendent evidence of having taught successfully twenty-four school months during the time said certificate has been in force, may have same renewed without further examination, and such renewal and succeeding renewals shall be for terms of five years; but such renewal certificates shall lapse upon the failure of the holder to teach for a period of two consecutive school years. A teacher holding a second-grade certificate, who has taught in the primary grades of the public schools of the State for not less than thirty-six months immediately preceding the expiration of said certificate, and who has taken at least one subject of the teacher's reading circle work each year, may have said certificate renewed once for two years as a primary teacher. All applicants for certificates above third grade who shall attain the required percentage in eight of the designated subjects shall be credited for those subjects in which they shall have passed, and upon passing the required percentages in the remaining subjects at the next subsequent examination shall receive a certificate in accordance with the result of both examinations. Any teacher to whom a certificate has been granted by any county board of examiners in this State, or by lawful examiners in any other State or Territory the requirements to obtain which were not less than in this State, or any teacher holding a diploma or certificate of graduation from any State or Territorial normal school, or from the normal department of the University of the State of Washington, may present the same to a county superintendent, who shall grant to said person a temporary certificate; *Provided*, That such teacher was not a resident of the county at the time of the last examination, or else was not able by reason of sickness or other unavoidable cause to attend said examination.

Any certificate may be revoked by the authority entitled to grant the same upon the determination of sufficient cause, after the holder shall have been given an opportunity of being heard.

Duties.—Every teacher employed in any common school shall make a report to the county superintendent at the time he contracts to teach such school, the number of the district in which he is to teach, the grade of his certificate, the date it expires, and the proposed length of term, and at the close of any school shall report to the county superintendent on the blanks prescribed by the State superintendent. Any teacher who shall be teaching at the close of the school year, or who shall teach the last term of any school year in any school district, shall make a report to the county superintendent immediately upon the close of such school year or term, for the entire time taught in said school district since the beginning of the school year. Copies of all reports made by teachers shall be furnished to the clerk of the district, to be filed in his office. No board of directors shall draw any order or warrant for the salary of any teacher for the last month of his service until the reports herein required shall have been made and received: *Provided*, That in all schools under the direction of a city superintendent the report of such superintendent shall be accepted by the county superintendent and the directors in lieu of a teacher's report, and that when there is no city superintendent the report of the principal shall be accepted in lieu of the teacher's report.

Every teacher shall keep a school register in the manner provided for, and no board of directors shall draw any warrant for the salary of any teacher for the last month of his service in the school, at the end of any term or year, until they shall have received a certificate from the district clerk that the said register has been properly kept, the summaries made, and the statistics entered, or until by personal examination they shall have satisfied themselves that it has been done. Teachers shall faithfully enforce in the school the course of study and regulations prescribed, and if any teachers shall willfully refuse or neglect to comply with such regulations their salaries may be withheld. Teachers maltreating or abusing any pupil by administering undue or severe punishment, or inflicting punishment on the head or face, shall be deemed guilty of a misdemeanor and shall be fined in a sum not to exceed \$100.

Preliminary training.—There are established three State normal schools for the training and education of teachers in the art of instructing and governing the schools of the State. The schools are under a board of 5 trustees who manage the affairs of the schools.

Institutes.—Whenever the number of school districts in any county is 25 or more, the county superintendent shall hold a teachers' institute each year, and

every teacher employed in a common school in the county must attend such institute during its whole time. In any county where there are less than 25 school districts the county superintendent may, in his discretion, hold an institute. Each session of the institute must continue not less than three days. When the institute is held during the time the teachers are employed in teaching, their pay shall not be diminished by reason of their attendance when certified to by the county superintendent. The county superintendent must keep an accurate account of the actual expenses of the institute, with vouchers for the same, and present the bill to the county commissioner, who will allow the same, but not to more than \$200 in any one year. Any teacher who willfully neglects to attend an institute shall be deprived of his certificate.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—Every common school shall be open to all children from 6 to 21 years of age; and all parents, guardians, and others having immediate charge of any child or children between the ages of 8 and 15 years shall send the same to school at least four months each year, and in graded school districts in incorporated cities and towns such children shall be sent to school at least six months each year. All school districts in this State shall maintain school at least five months each year, and in incorporated cities and towns the minimum length of term for each year shall be six months, and in cities of 10,000 or more inhabitants, 8 months. The school day shall be six hours in length, inclusive of a noon intermission, but the time may be reduced by the board of directors, except that for primary pupils it must not be less than four hours.

Character of instruction.—In every school shall be taught, in the English language, the following subjects: Reading, penmanship, orthography, written and mental arithmetic, geography, English grammar, physiology and hygiene, with special reference to the effects of alcoholic stimulants and narcotics, history of the United States, and such other studies as may be prescribed by the board of education. Attention must be given during the entire course to the cultivation of manners, to the laws of health, physical exercise, and ventilation and temperature of the schoolroom. The high schools (also normal schools, State university, and other State educational institutions) are a part of the public school system. The work is divided into twelve grades. The first eight cover the work of the common school, and the ninth, tenth, eleventh, and twelfth grades constitute the high school work. Two or more common school districts may unite to form a union high school. The State gives, aside from the regular apportionment for attendance, \$100 a year for each grade maintained by such union high school district.

Text-books.—In each district of the first class (i. e., one maintaining a high school with not less than a two years' course of study) there shall be a text-book commission composed of five persons, namely, the city superintendent (or, if there be none, the principal of the high school) as ex officio chairman, and two members of the city board of education or district board of directors, and two teachers teaching in the district, to be designated by such city or district board for a term of five years. Text-books shall be selected by said commission covering the course of study issued by the State superintendent for such schools, together with any books supplementary or additional thereto which may be deemed necessary, and such books when adopted shall continue in use for three years and until displaced by order of the commission.

In each county containing any school district of the second class (i. e., one not maintaining a high school) there shall be a county board of education composed of five members, namely, the county superintendent as ex officio president, and two teachers and two citizen taxpayers of the county, to be designated by the county commissioners for a term of four years. The State superintendent shall prescribe a uniform course of study for all schools of the second class, and each county board shall adopt books covering the same and may adopt any books additional or supplementary thereto when deemed necessary, which books shall continue in use for five years and until displaced by order of the said county board. A second-class district lying in two or more counties shall be under the jurisdiction of the oldest county.

Each member of the text-book commission of a first-class district shall receive \$3 a day as compensation while so employed, and each member of a county board 10 cents per mile traveled in attending meetings of the board. The commission

and board shall advertise by newspaper for proposals to furnish books, which proposals shall state an exchange, a wholesale, and a retail price at which such books will be furnished. A sample copy of each book contracted for shall be deposited by the publisher with the State superintendent.

Buildings.—The control of school property is vested in the board of directors, and such property may be acquired or sold by the board when authorized by the district meeting. Any pupil who shall in any way cut, deface, or otherwise injure any schoolhouse, furniture, fence, or outbuilding thereof, or any book belonging to another pupil or to the district library shall be liable to suspension and punishment, and the parent or guardian of such pupil shall be liable for damage on complaint of the teacher or any director and proof of the same.

4. FINANCES.

Funds (permanent and special)—Taxation.

Funds (permanent and special).—The principal of the common school fund shall remain permanent and irreducible. The said fund shall be derived from the following-named sources: Appropriations and donations by the State to this fund; donations and bequests by individuals to the State or public for common schools; proceeds of lands and other property which revert to the State by escheat and forfeiture; proceeds of all property granted to the State, when the purpose of the grant is not specified or is uncertain; funds accumulated in the treasury of the State for the disbursement of which provision has not been made by law; proceeds of the sale of timber, stone, minerals, or other property from school and State lands other than those granted for specific purposes; all moneys received from persons appropriating timber, stone, minerals, or other property from school and State lands other than those granted for specific purposes, and all moneys other than rentals received from persons trespassing on said lands; 5 per cent of the proceeds of the sale of public lands lying within the State which shall be sold by the United States subsequent to the admission of the State into the Union, as approved by section 13 of the act of Congress enabling the admission of the State into the Union; the principal of all funds arising from the sale of lands and other property which have been or hereafter may be granted to the State for the support of common schools. The legislature may make further provisions for enlarging said fund. The interest accruing on said fund, together with all rentals and other revenues derived therefrom, and from lands and other property devoted to the common school fund, shall be exclusively applied to the current use of the common schools.

All schools maintained or supported wholly or in part by the public funds shall be forever free from sectarian control or influence. All losses to the permanent common school fund which shall be occasioned by defalcation, mismanagement, or fraud of the agent or officers controlling or managing the same shall be audited by the proper authorities of the State. The amount so audited shall be a permanent funded debt against the State in favor of the particular fund sustaining such loss, upon which not less than 6 per cent annual interest shall be paid.

Taxation.—In addition to the provisions for the support of common schools hereinbefore provided, it shall be the duty of the State board of equalization annually, at the time of levying tax for State purposes, to levy a tax that shall be sufficient to produce a sum which, when added to the estimated amount of money to be derived from the interest on the State permanent school fund for the current fiscal year, shall equal \$10 for each child of school age residing within the State, as shown by the last report of the several county superintendents to the State superintendent, provided said tax shall not exceed 5 mills on the dollar. Said tax levy shall be certified to the several county auditors in the same manner as other State taxes are required to be certified, and shall be collected and transmitted to the State treasurer at the same time and in the same manner as other State taxes are required to be collected and transmitted; and it shall be the duty of the State auditor, within thirty days after the date at which county treasurers are required to transmit State funds to the State treasurer, to certify to the State superintendent the amount of all State annual school funds in the hands of the State treasurer subject to apportionment.

For the support of the common schools there shall also be set apart by the county treasurer all moneys arising from fines for breach of any penal law of the State, and it is hereby made the duty of all county clerks, justices of the peace, or other officers receiving any moneys arising from such fines or licenses,

or any other moneys belonging to the school fund as above provided, to turn the same over to the county treasurer within thirty days after the date of its collection, taking his receipt therefor; and all such officers shall make a report to the county superintendent quarterly.

The board of directors may, for the purpose of furnishing additional school facilities for the district, the payment of teachers' wages, or for the building of one or more schoolhouses, or for the repairing of any school house or houses, or for the building of additions thereto, or for the purchase of fuel, supplies, globes, maps, charts, books of reference, or other appliances for teaching, levy a special tax not to exceed 10 mills on the dollar: *Provided*, That no tax exceeding 5 mills shall be levied until such levy shall have been ordered by a majority vote of the legal voters of the district at an election called for the purpose.

In cities of 10,000 or more inhabitants the board of education shall annually report to the county commissioners an estimate of the amount of funds required for the school system, in addition to the estimated receipts from the State, which sum the county commissioners are required to levy and collect; but the aggregate school tax shall never exceed 1 per cent upon all the taxable property of the district. No county tax for school purposes shall be levied upon the property situate within the limits of any school district provided for in this act, nor shall any such district be entitled to or receive any portion of the common school fund raised by county tax. In case the purchase of sites and erection of buildings shall require more than \$50,000 in any one year, the matter shall be submitted to the voters.

The board of directors of any school district may borrow money and issue negotiable coupon bonds therefor to an amount not to exceed 5 per cent of the taxable property in such district, as shown by the last assessment roll for county and State purposes: *Provided*, That in incorporated cities the assessment shall be taken from the last assessment for city purposes, for the purpose of funding outstanding indebtedness on bonds, or for the purchase of schoolhouse sites, or for building schoolhouses and providing the same with all necessary furniture and apparatus, when authorized by vote of the district so to do, but the bonds so issued shall bear a rate of interest not to exceed 6 per cent per annum, payable and redeemable at such time as may be designated in the bonds, but not to exceed twenty years from the date of issue.

The county commissioners must ascertain and levy annually the tax necessary to pay the interest upon such bonds as it becomes due; and at the expiration of one-half of the time for which said bonds are to run, and annually thereafter until full payment of said bonds is made, they may, if deemed advisable, levy, in addition to the tax required to pay the interest, such amount for sinking fund to meet the payment of said bonds at maturity, to be determined by dividing the amount of bonds outstanding by the remaining number of years to run, and the fund arising from such levy shall be kept as the bond-redemption fund of said district, and each of said tax levies shall be a lien upon the property in said district, and must be collected in the same manner as taxes for other school purposes.

WEST VIRGINIA.

1. ORGANIZATION OF THE SYSTEM.

State superintendent—State board of examiners—Board of the school fund—County superintendent—District board—Subdistrict trustees.

State superintendent.—There shall be elected a State superintendent of free schools, whose term of office shall be the same as that of the governor. He shall be a person of good moral character, temperate habits, of literary acquirements and skill and experience in the art of teaching, and shall be paid \$3,000 annually, and necessary expenses not to exceed \$500 per year. He shall have his office and residence at the capital, have an official seal, sign all requisitions on the auditor for the payment of State money for school purposes, supervise all county superintendents and free schools of the State, see that the law is executed, prepare and forward all blanks required, correspond with educators and school officers abroad, collate the result of his investigations, make himself acquainted with peculiar wants of each section of the State, and annually report to the governor. He shall have general control of all matters relating to the examination of applicants for teachers' certificates and the issuance of the same.

State board of examiners.—There shall be a State board of examiners, consisting of five competent persons, one from each Congressional district, to be appointed by the State superintendent, to serve for four years. (See also Teachers—Appointment and qualifications.) Each member receives a per diem of \$5 for time actually spent in discharge of duty and 6 cents a mile for distance traveled.

State board of the school fund.—(See Finances.)

County superintendent.—A county superintendent of free schools shall be elected every four years by the county electors. He shall visit each school within his county at least once during the school year and note its scholastic character and physical surroundings, and shall labor steadily to procure uniformity of instruction throughout the county and promote the efficiency of the teaching force, reporting concerning these facts annually to the State superintendent. He shall make up a report to the State superintendent from the district reports to him concerning the condition of schoolhouses, the value of apparatus, and the volumes in and value of school libraries, and, further, to report the districts failing to make a return of the number, etc., of youth within them, and those that have failed to make the annual district levy for support of primary schools.

County board of examiners.—There shall be in every county a board of examiners, composed of the county superintendent and two experienced teachers, who shall be nominated by the county superintendent and appointed by the presidents of the district boards of education for a period of two years, one retiring annually. They shall each receive pay at the rate of \$3 per day of actual service, to be paid out of the fees collected from applicants for certificates. The county board of examiners are under the government and control of the State superintendent, who shall designate the time of examinations, to be held simultaneously in all counties of the State, not exceeding five in any one year, for which the State superintendent shall prepare questions and send them under seal to the county superintendent, who, with the other examiners, shall open them in the presence of the applicants assembled for the examination. The examiners shall collect the manuscripts and send them under seal to the State superintendent, who shall grade them and issue the certificates. All applicants pay an examination fee of \$2.

District board.—The district board of education shall be composed of a president and two commissioners, elected by the voters of each school district (coextensive with each magisterial district of the county) for terms of four years, the two commissioners to retire at biennial intervals. They shall appoint for each subdistrict three intelligent trustees, each to hold for three years, one to retire annually. The board of education shall fix the salary of the teachers and elect a secretary, who shall not be a member. The board shall have general control and supervision of the schools and school interests, determining the number and location of its schools, provided that every village of 50 or more inhabitants shall be included in one subdistrict. The district board shall cause a sufficient number of primary schools to be kept, require every teacher to enumerate the youth (6 to 21), and report the following facts: Youth 6 to 16 years of age, youth 16 to 21 years of age, distinguishing sex and race, determine the rate of taxation necessary for teachers' and building funds, and furnish record books and blanks to teachers. The members receive \$1.50 per diem, not exceeding \$10.50 a year, one day of which shall be spent in attending a teachers' institute.

Subdistrict trustees.—The trustees of the subdistricts are three in number, appointed for three years by the board of education, one retiring annually. They shall have charge of the schools in their district and appoint teachers, making a written contract; visit every school under their charge, once within two weeks after the opening and again within two weeks before its close, thoroughly inspecting the premises, the character of instruction, and the proficiency of the pupils; may purchase fuel, brooms, and other things incidental to school-room use, and make repairs, rendering an account to the secretary of the board of education.

2. TEACHERS.

Appointment, qualifications, and duties—Preliminary training—Meetings.

Appointment, qualifications, and duties.—No teacher shall be employed without having a certificate of qualification to teach and govern a school. Examinations are conducted by the county board of examiners under the direction and control of the State superintendent, who issues the certificates. No college

diploma or certificate of recommendation shall supersede the necessity of an examination. The certificates shall be graded as follows: The first-grade certificate shall be issued for five years to all applicants who obtain an average of 90 per cent (not less than 75 in any subject) on examination in all the branches required to be taught in the primary schools, the theory and art of teaching, general history, civil government, and bookkeeping. The second-grade certificate shall be issued to all applicants who obtain an average of 80 per cent (not lower than 70 in any branch) on the same branches as required for first-grade certificates, and is good for three years. The third-grade certificate shall be issued to those who obtain an average of 70 per cent (not lower than 60 per cent in any one branch) on the same branches as required for first-grade certificates; it is valid for one year and may be reissued once only. Failure to attend a county institute without good excuse disqualifies for teaching that year.

The State board of examiners issue two grades of certificates—first class, valid for twelve years; second class, for six years. First-class certificates are issued to persons who possess the requisite scholarship and professional experience; second class, to applicants who, in addition to the branches required for the county certificate, pass in four other branches. Second-class certificates are granted to the graduates of the State normal school, the State university, the Peabody Normal College of Tennessee, and of other schools in the State approved by the board, when such graduates have taught successfully three years in the State under a No. 1 county certificate, two of which shall immediately precede the date of the application for certificate. Persons teaching successfully four years under a second-class certificate shall be entitled to a first-class certificate at the expiration of the second class. Each applicant shall pay a fee of \$5.

Every teacher shall keep a register, in which he shall enter the date of the beginning and close of the term, the name, sex, age, and studies of each pupil, and other particulars specified by authority. Failure to properly keep and deposit the register forfeits the balance due to the teacher. Teachers are required to take the school census.

Preliminary training.—The West Virginia Normal School (Marshall College), with its five branches, is under the control of a board of regents of the State normal school, appointed by the governor. There are two State institutions for the education of colored youths, and the State superintendent is authorized to arrange with some other institution within the State for the training of a number of colored teachers.

Institutes.—Teachers' institutes are held in each county of the State annually, continuing five days, under the direction of the county superintendent and instructors appointed by the State superintendent. Teachers pay an enrollment fee of \$1, and are allowed pay at the rate of \$1.50 per day for attendance, and failing to attend they are not allowed to teach unless excused from attendance by the county board of examiners. Members of boards of education are allowed pay for one day's attendance. District institutes, one or more annually in each district, are conducted by county superintendents, and teachers are allowed pay for one day's attendance.

3. SCHOOLS.

Attendance—Character of instruction—Text-books—Buildings.

Attendance.—White and colored children are to be taught in separate schools. Every youth between the age of 6 and 21 years shall have a right to receive instruction at the free primary schools. Subdistrict trustees shall provide one or more primary schools for the colored children when they number more than 10, or the board of education shall provide other equal educational facilities. Schools must be kept at least five months.

Character of instruction.—In the primary schools there shall be taught orthography, reading, penmanship, arithmetic, English grammar, physiology, general history, history of the United States and of West Virginia, geography, single-entry bookkeeping, civil government, and the theory and art of teaching. It shall be the duty of the State superintendent to prescribe a manual and graded course of primary instruction to be followed in the country and village schools, and for the graduation of those completing the course.

Text-books.—For the purpose of selecting text-books for use in the free schools of the State there is established in every county a school-book board, composed of the county superintendent, who is ex officio secretary, and eight

other respectable citizens, at least four of whom shall be freeholders and not school teachers, and at least three of whom shall be teachers holding a No. 1 certificate and engaged in teaching. The said eight persons are appointed by the county court, and not more than five shall belong to the same political party. They hold office for four years, and all contracts are made for a period of five years. Boards of education are authorized, at their option, to purchase and supply to the pupils of their district all necessary text-books free of charge.

Buildings.—The board of education of every district shall provide suitable schoolhouses and grounds, but in erecting buildings they must submit the plan to the county superintendent, whose duty it is to be acquainted with the principles of schoolhouse architecture, and in all his plans he shall study economy, convenience, health, and durability. To provide sites, schoolhouses, and furniture a district tax must be levied, not to exceed 40 cents on the \$100 of property, except that for the support of district high schools an additional levy not exceeding 30 cents on the \$100 valuation may be laid.

4. FINANCES.

Funds (permanent or special)—Taxation.

Funds (permanent or special).—The money accruing to this State from forfeited, delinquent, waste, and unappropriated lands and lands sold for taxes, the State's share of the literary fund of Virginia, or other claims of an educational nature upon her, estates of intestates, escheated lands, the taxes levied upon the revenues of corporations and exemptions from military duty, constitute the school fund, now limited by the constitution to \$1,000,000. For the management of the fund a board of the school fund is created, composed of the governor, State superintendent, auditor, and treasurer. The interest of the fund is applied annually to the support of free schools.

Taxation.—The legislature shall levy for support of free schools an annual capitation tax of \$1 on every male inhabitant of 21 years or more.

For the support of free schools there shall be a State tax of 10 cents on the \$100, which, together with the interest of the school fund, forfeitures, fines, and confiscations, the annual capitation tax, dividends on bank stock held by the board of the school fund, shall be called the general school fund, and shall be annually distributed to the several counties in proportion to the youth therein, less the salary and expenses of the State superintendent; but no district is to receive its share unless it has annually raised enough money in connection with the State apportionment to keep the schools open for at least five months, or as many as have been settled upon by the voters: *Provided*, That the local tax shall not exceed 80 cents on the \$100, the levy and the State money to be called the teachers' fund. To provide buildings, sites, furniture and appliances, and repair them, the board of education shall annually levy a tax on the property in the district not to exceed 40 cents on the \$100.

WISCONSIN.

[Although the following digest of the school law of Wisconsin does not formally comply with the scheme prepared by the Bureau, yet, as much of the information called for by that scheme can be found in the digest, it has been deemed advisable to print it as it stands.]

The statute provides for the organization of school districts, which shall consist of contiguous territory, but must not contain more than 36 square miles. It also provides for the organization of towns under the township system of school government. Under this system the number of square miles which may be organized as a township district is not limited. Under the independent system of school government the electors at the annual school meetings, held the first Monday in July of each year, are authorized to elect a school district board of three members—clerk, director, and treasurer. The term of office is three years. If vacancies occur they may be filled by appointment by the other members of the board if made within ten days. If not made within ten days they are filled by an appointment made by the town, city, or village clerk. Under the township system of school government the town is, for convenience, divided into subdistricts, the annual meeting of which is held the first Monday

in June. The subdistrict clerk becomes a member of the town board of school directors. This board has two regular meetings in each year, the first for the purpose of organization occurs on the second Monday in June, and the semi-annual meeting on the third Monday in March. At the first meeting an executive committee, consisting of a president, vice-president, and secretary, is chosen. The secretary is not of necessity a subdistrict clerk. This executive committee is made responsible for the transaction of all business relating to school matters.

Incorporated cities have, as a rule, a board of education, the members of which are appointed by the mayor. This board transacts all the business relating to the school affairs of the city, subject to review of the common council. Any city under the district system of school government having a high school within its boundaries and expending a sum annually for maintenance of the school exceeding \$4,000 may elect a school board of seven members. The laws of 1901 granted State aid to rural districts that established graded schools. These schools are divided into first class (those having three or more departments) and second class (those having but two departments). Special aid is granted to such schools when maintained according to law in the sum of \$300 to first class and \$100 to second-class schools. Two inspectors are appointed by the State superintendent. It is their duty to visit these schools each year and make report upon the condition of the grounds, outbuildings, building, and the organization of the school and the adoption and pursuit of the courses of study. These courses are recommended by the State superintendent. The inspectors receive an annual salary of \$1,600 a year and their traveling expenses. The principal of a State graded school of the first class must hold some form of State certificate. One assistant, holding a third-grade certificate, may be employed. Such person must, however, have had one year's successful experience as an additional qualification. One other teacher may be employed, having at least a second-grade certificate, and all other assistants must hold at least first-grade county certificates. The principal of a graded school of the second class must hold at least a first-grade county certificate, and the assistant may be qualified with a third-grade county certificate. One year's successful experience as a teacher is also required in this case.

The electors of a school district may authorize the board to suspend the school and provide for free transportation and tuition, or for tuition only, in some adjoining district or districts. Under the township system of school government the secretary of the town board of directors is required to inspect each school in his town at least twice during each term, and he must keep the records of the board. His compensation for his services must not exceed \$75 in any one school year. If the electors at the annual town meeting vote a compensation to the president and vice-president of the executive committee of the town board of directors, the amount may be \$2 a day for not to exceed fifteen days in any one year. Any school district or subdistrict under the township system of school government may maintain several schools in separate school-houses located in different parts of the district. A course of study for common or rural schools printed and commented upon in a pamphlet of some 150 pages is published and distributed under the direction of the State superintendent. The branches which the statute requires shall be taught in the public schools are: Orthography, orthoepy, reading, writing, grammar, geography, arithmetic, history of the United States, Constitutions of the United States and Wisconsin, and physiology and hygiene, with special reference to the effect of stimulants and narcotics upon the human system. All instruction shall be in the English language, except that the board may cause any foreign language to be taught by a competent teacher in each school not to exceed one hour each day. Every teacher in a public school must hold some form of a certificate, otherwise no money can be lawfully paid from the public treasury for services rendered.

Kindergartens.—District boards, town boards of school directors, and boards of education may provide for kindergarten departments in connection with the public schools. In districts under the district system the electors must provide for the levy of a tax for the maintenance of kindergarten departments before they can be established by the board, and but 40 pupils are permitted to each kindergarten department. The school year begins July 1, and all persons between the ages of 4 and 20 years are privileged to attend the public schools in the district in which they reside free of tuition. These schools must be maintained for at least seven months in each year before the district is entitled to share in the annual apportionment made by the State superintendent from the school-fund income, or the apportionment made by the county board of super-

visors, which is raised by a tax upon the property of the town. Attendance on some private or parochial school is compulsory between the ages of 7 and 14, or if the child is not employed until the age of 16, unless such child shall reside more than 2 miles from the public school by nearest traveled highway. The child is required to attend in country or village districts for at least twenty weeks in each year and in cities for at least thirty-two weeks of each year. If a child is not employed the compulsory age is extended until he is 16 years of age.

When a school district is newly organized the board may make the first selection of text-books. No second selection can, however, be made by the board unless first authorized by a majority vote of the electors at an annual meeting, unless the district has voted to furnish text-books free. In such cases the district board is empowered to adopt new text-books at any time. Under other circumstances no change of text-books can be made until at least three years have expired after adoption.

The total amount of tax which may be levied and raised for school purposes in ordinary school districts shall not exceed in any one year 2 per cent of the total assessed valuation of taxable property in the district, and in districts under the township system of school government the tax shall not exceed 1 per cent for school purposes.

The power of contracting with teachers and fixing the wages per month, term, or year is vested in the board and is limited only by the amount of money which may be used for teachers' wages. The electors may determine whether the teacher shall be a male or female, and the board in making a contract is bound by the vote of the electors. Every school district board is presumed to purchase a United States flag for every schoolhouse and such apparatus as may be necessary for its display or preservation. The district board has the care and keeping of the schoolhouse, books, apparatus, and other property of the district. They also have power to make all rules needful for the government of the school and to suspend and expel pupils for noncompliance with such rules when the interest of the school demands.

Free high schools were provided for by an act of the legislature of 1875. Special State aid to the amount of \$100,000 is now apportioned each year. Courses of study for these high schools are formulated by the State superintendent, and must be followed and adopted by the free high school boards. Two hundred and six of these schools have adopted a four-year course of study, requiring four years for its completion and 32 a course of study requiring three years for its completion. The statute also provides for town high schools, in which the entire town is considered the high school district, and all persons residing in the town prepared to take up the course of study for such schools are permitted to attend free of tuition. The legislature provides that any person of school age prepared to enter a free high school and who may reside in any town or incorporated village, but not within a free high school district, and who shall have completed the course of study in the district in which he resides, or one equivalent thereto, may be admitted to a free high school, his tuition not to exceed \$2 per month, to be paid by a tax levied upon the town or village where he resides.

A high school inspector is appointed by the State superintendent with an annual salary of \$1,800 and traveling expenses. It is his duty to visit the high schools and to inspect the courses of study as carried on in them. The statute also requires that the principal of a free high school shall hold some form of a State certificate and that the qualifications of the free high school assistants be approved by the State superintendent. It is rare that any qualifications not earned by an examination before the State board of examiners or by graduation from some State normal school, some college of high standing or some State university, are accepted. The annual apportionment to district high schools is made pro rata, while that to the town free schools is always one-half of the amount actually expended for instruction in said schools. The apportionment for the year ending June 30, 1903, was \$434.50 to each district free high school expending \$1,000 or more in its instructional force. High schools are, upon application to the State university, inspected with a view to being placed upon the university accredited list. When so placed graduates from these high schools are admitted to the courses of study in the State university without further examination.

Day schools for the deaf may be established in cities and villages on approval of the State superintendent. Eighteen such schools were maintained in this State for the year 1904, with an enrollment of 221. A special appropriation of

\$150 per capita for each 180 days of attendance is provided by the State. Instruction is by the oral method. These schools, as well as the State school at Delavan, are under the supervision of an inspector, appointed by the State superintendent at a salary of \$1,500 a year, with traveling expenses.

County training school for teachers.—The statute provides for county training schools for teachers. The county board of any county in which no State normal school is located is authorized to appropriate money for the organization, equipment, and maintenance of such a school. The State superintendent shall prescribe the courses of study to be pursued and shall determine the qualifications of all teachers employed in such schools. Any school established and whose courses of study and the qualifications of whose teachers have been approved by the State superintendent, may receive special aid from the State of the sum of one-half the amount actually expended for maintaining each school during the year, provided that the total amount apportioned to any one school shall not exceed \$2,500 in any year. The chief objects of these schools are to instruct the teachers in methods of organization, teaching, and management of public schools.

Academic instruction is also given, and any person who completes in a satisfactory manner the course of study prescribed for any county training school shall receive a certificate signed by the principal of the school and by the members of the training school board to the effect that such person has satisfactorily completed the course of study prescribed for the school and is of good moral character. This certificate shall have the force and effect of a third-grade county certificate for the period of three years after graduation. Joint training schools may be established between counties if necessary, and tuition may be charged to persons who may attend and who live outside the county boundaries. Seven such schools have been established in this State, and the reports shown that these institutions are strong factors in educational work and that the statute making provision for them was unquestionably wise.

Normal schools.—Seven State normal schools are in active operation in various parts of the State. The first one was established in 1865. These schools are incorporated under a board of seven local regents and three at large, at least one of whom shall be a woman. These regents are appointed by the governor for a term of five years. The State superintendent is a member ex officio. This board of regents of normal schools has the government and control of all the normal schools. The board shall hold an annual meeting at the capitol on the second Wednesday of July in each year. This meeting is for the purpose of closing up the business for the year just closed and of arranging for the work of the current year. A semiannual meeting is held during the month of February in each year. An executive committee of three members selected by the board meets the last Wednesday in each month for the purpose of auditing accounts. The State superintendent annually appoints a board of three visitors to each normal school. It is the duty of these visitors to examine into the conditions, organization, and management of the school and make a report to the State superintendent. The traveling expenses of these committees are paid from a normal school fund. More than 2,000 persons have graduated from the elementary courses of study and 4,000 from the advanced or four-year courses. It is probable that more than 95 per cent of these graduates have taught a greater or less period in the public schools of this State. The courses of study provided for these schools, while giving due attention to academic and domestic branches, consist of large instruction along lines of pedagogy, school organization, and management.

Institutes.—Institutes for the instruction of teachers shall be held in each year in such counties as may be designated by the State superintendent, with the advice and concurrence of the institute committee of the board of regents of normal schools. The work is outlined uniformly each year by the State superintendent; systematic records of work done are kept by each institute conductor and are sent to the State superintendent at the close of every institute. One and sometimes two institutes are usually provided for each county during the year. Several conductors are usually appointed, and the work is sectioned in order that the best results may be obtained. A school of instruction for institute conductors is held in the latter part of March each year. The number of persons usually attending this school is more than 200. Fourteen thousand dollars are appropriated from the normal school fund for the maintenance of county institutes, and a fee of \$1, collected by each county superintendent from each applicant for a county certificate, is also made a part of the fund.

Agriculture.—Schools of agriculture and domestic economy are provided for

by an act of the legislature of 1901. This act was amended by the legislature of 1903, providing for at least four such schools and providing that the amount of State aid received by each shall equal two-thirds the amount actually expended for maintaining the school during the year, provided that no more than \$4,000 shall be apportioned to any one school in any one year. The course of study covers two years, and includes the elements of agriculture, domestic science, political and domestic economy, with the work in composition, literature, United States history, and civics and commercial arithmetic, with farm accounts. Before these schools are entitled to State aid their work must be approved by the State superintendent and the dean of the agricultural college maintained in connection with the State university. Two schools of this class have been organized and maintained under the law. Their creation seems to be fully justified. The instructors of the school improve every opportunity to talk to the citizens of the county on all suitable occasions. An increased interest in agriculture has arisen as a result. A few acres of land for farming purposes is appropriated for the use of each agricultural school.

University of Wisconsin.—The government of the State university is vested in a board of regents, consisting of one member of each Congressional district and two from the State at large (thirteen in all). At least one of these regents shall be a woman, and all are appointed by the governor for a term of three years. The State superintendent and president of the State university are ex officio members of this board. The faculty consists of 228 professors and instructors for the year ending June 30, 1904, and the enrollment of students in each department was over 3,000. The school buildings are of the most commodious character and are constantly being added to. The establishment of the short course for agricultural and dairy students has been of incalculable benefit to the State. Two years of fourteen weeks each are required in order to complete these short courses, and they are open to those who have completed the course of study in the common schools or an equivalent course.

ADMINISTRATION.

State superintendent.—Wisconsin has no State board of education with general power. The State superintendent has general supervision of all public schools. The law until 1903 was to the effect that the term of office should be two years and that he should be nominated at convention and elected at the general election, as other State officers are elected. For many years an effort has been made to have the election of the State superintendent removed as far as possible from politics. For this purpose various amendments to the constitution have been attempted, but not until the fall of 1902 was one passed by a majority vote of the electors of the State. Under an amendment to the constitution women as well as men were authorized to vote on this amendment, which proposes that the State superintendent shall possess educational qualifications as high at least as any required by any certificate which he is authorized to grant, that he must have taught at least five years, and that his term of office shall hereafter be four years. He is to be elected the first Tuesday in April, at the same time the supreme court, circuit, and county judges are elected. The salary is fixed at \$5,000 per year. He has general supervision over the common schools of the State, over establishment and management of county schools of agriculture and domestic science, manual training schools, county training schools for teachers, and day schools for the deaf. He must formulate courses of study for schools of all grades and appoint one high school inspector, an inspector of day schools for the deaf, and two graded school inspectors, whose duties are to visit the different schools, examine into their management, organization, courses of study, and equipment, and report to the State superintendent. He also apportions school funds, decides appeals, holds at least one convention of county superintendents each year, and is required by law to make a report to the governor in each even-numbered year containing a statement of the condition of all schools, including the normal schools and the State university. He is also required to appoint a State board of examiners on the last Wednesday in August of each year. This board conducts the examinations for State teachers' certificates. These certificates are of two classes, limited and unlimited. The limited certificate is good for five years, and the unlimited for life, unless revoked by competent authority.

County superintendents.—Each county is under the supervision of a county superintendent. Two counties in the State are divided into two superintendent districts each. The county superintendent will hereafter be elected at the

same time and in the same manner as the State superintendent is elected. He must hold some form of State certificate as an educational qualification and must have had at least eight months experience in a public school. It is his duty to examine and license teachers, visit all schools annually or oftener and report their condition to the board of supervisors of his county and also the State superintendent. Women as well as men may hold this office. The county superintendent may grant certificates of the first, second, and third grade. The branches required for a certificate of the third grade are: Orthoepey, orthography, reading, penmanship, arithmetic, English grammar, geography, history of the United States, Constitution of the United States, constitution of the State of Wisconsin, physiology and hygiene, with special reference to the effect of stimulants and narcotics on the human system, the theory and art of teaching, manual of the elementary course of study for the common schools of Wisconsin, and the elements of agriculture. This certificate legally qualifies the holder for one year. For the second-grade certificate the applicant must pass an examination in all the foregoing branches and also in algebra, physical geography, American literature, and English composition. This certificate is good for three years. For the first-grade certificate the applicant must pass an examination in all the branches above named and also in physics, plane geometry, English literature, and English history. A certificate of the first grade is a legal qualification for five years. The law also provides that certificates may be secured in counties other than the one in which the applicant was examined by transfer of the papers written at the examination to the superintendent of the county in which a school has been engaged.

District board.—The district board consists of three members—a clerk, director, and treasurer—each elected for a term of three years. This board has full power to contract with teachers, select text-books on their own motion when a new district is created, and by a majority vote of the electors in case a change is desired in an old district. The members exercise general supervision over the schools of the district. In township districts all the subdistricts constitute the township board.

City superintendents.—There are 50 cities in the State under city superintendents. These officers are chosen by the board of education for one year. The law requires that no persons shall be eligible to the office of city superintendent who does not possess the legal qualifications required for the principalship of a four-year course free high school.

CHAPTER V.

THE UNIVERSITY OF PARIS DURING THE MIDDLE AGES.

By JOHN W. HOYT, A. M., M. D., LL. D.

[Author of Official Reports on Education in Connection with the Paris (1867), Vienna, and Philadelphia Universal Expositions, Progress of University Education, Outline Histories of the Universities of Bologna, Oxford, and Cambridge during the Middle Ages, and of a Memorial (to the United States Senate) concerning a National University, etc.]

PREFACE.

The University of Paris holds an important place in the history of higher education during the Middle Ages, surpassing in some respects, especially in the early completeness of its organization, that of the University of Bologna. It has accordingly received a careful study, with such consultation of authorities as the libraries at Washington have made possible, though only such have been mentioned as have seemed entitled to first consideration and were made the author's final dependence.

The volume of this account could have been greatly and readily increased by the inclusion of many details under each heading, but the object has been rather to present such leading facts as are most important, forming an historic outline that would be at once readable and easily remembered. And for the same reason the author has not burdened the account with the great number of references that would have been necessary, if footnotes were used at all.

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I.—ORIGIN OF THE UNIVERSITY OF PARIS--CAUSES.

While it is extremely difficult to determine the origin of the University of Paris with the exactness which attaches to modern institutions, nevertheless quite satisfactory conclusions have been reached, and the originating causes of its rise have been found exceedingly interesting. For convenience, they will be presented as causes general and causes more direct.

I.—GENERAL CAUSES.

1. Among the general causes which brought about its establishment we may properly consider—

(1) THE MOVING SPIRIT OF THE ONCOMING RENAISSANCE.

The eighth-century awakening, so ably inaugurated and vigorously led by Charlemagne, brought important results in all departments of Europe's intellectual activity. But they were necessarily short-lived, since so soon after his death they were followed by the break-up of the Frankish Empire, with succes-

slave and sweeping invasions from the north, and by repeated inroads of conquering armies from Arabia. Moreover, in so far as this earliest renaissance is educationally concerned, the great work done by him in the planting of schools of superior rank, in different parts of Europe, was chiefly, though by no means wholly, as some have thought, confined in purpose to the advancement of the church in the world.

Finally, under this head, history shows that, besides the famous Palace School established at Charlemagne's seat of empire and placed under direction of the renowned Alcuin, brought from York in 782, he founded yet others of almost equal importance, giving them into the hands of eminent prelates; and, while Bulaeus, as quoted by Newman, maintains that Charlemagne, having in mind the great schools of Athens, Alexandria, Constantinople, and Berytus, fostered those at Paris, Pavia, and Bologna with the intent to make them equally great, there yet seems no sufficient warrant for such an assumption other than that furnished by the comprehensive views, high aims, and unbounded ambition of the man himself. It certainly has not been shown that in the founding of great schools he either planted one at Paris or had direct part in furthering even the preliminary efforts of the school out of which the University of Paris is now known to have sprung. Nevertheless, the great Charles may justly be credited with the furtherance of agencies whose influence, by transmission from generation to generation, served in some measure to inspire the efforts of noble men in after times.

It is manifest that results of such transcendent importance could not have come in a single decade or a single generation, and that the enthusiasm of one or two brilliant revolutionists was not, as some writers have assumed, equal to so great an achievement.

(2) A LONG LINE OF EMINENT FORERUNNERS.

I mean such men as the great Alfred, most learned sovereign of his time (848-901), who, half a century after the death of Charlemagne, also founded a palace school, with the help of such renowned apostles of learning as Greenbold and Erigena; such men as Lanfranc, of Pavia (1005-1089), whose abilities and zeal in the cause of education won him the archbishopric of Canterbury at the hands of William the Conqueror; as Anselm (1033-1109), pupil of Lanfranc, whose rare genius and devotion made him originator of the scholastic theology, gave distinction to the school at Bec, made him Lanfranc's successor as archbishop, as well as practical reviver of metaphysical studies, and enabled him to profoundly stir the intellect of all Europe; such men as Peter Lombard (1100-1164), pupil in turn of Anselm and author of the *Book of Sentences*; and as William of Champeaux (1030-1117), also pupil of Anselm, afterwards archdeacon of Notre Dame, founder of that famous scholastic center, the Abbey of St. Victor, Bishop of Chalons-sur-Marne, leading realist of his day, and for a short time teacher of the youthful Abelard, who soon became yet more famous than he.

All these, and others only less distinguished, served to keep the torch which Charlemagne lighted from utter extinguishment during a period of three hundred years. No one of them became actual founder of the University of Paris; but who knows that it did not come a whole century, or even centuries, earlier on their account?

Indeed, when we come to deal more directly with that spirit of the twelfth century renaissance which we have recognized as one of the general agencies concerned in giving origin to the university, we trace it with confidence to these very masters, but more than all to the one last mentioned—that supreme

genius, whose breadth of view, coupled with an acuteness and subtlety of intellect unparalleled in his time, a passionate love of truth, familiarity with all past achievements, and power in dialectics made him master in the great fields of scholastic philosophy and scholastic theology, and whose high courage, enthusiasm, and eloquence enabled him to kindle zeal for learning throughout Europe.

It was Abelard who, after the defeat of his master, William of Champeaux, in philosophic discussion, and a short period of knight-errantry in philosophy, planted himself on the heights of St. Geneviève, at Paris, and there so dealt with the disturbing questions of the time as to gather about him students from the whole of Europe, even to the number of 5,000 and more. Most important of all in this connection, it was Abelard whose method of fearlessly, exhaustively, and impartially searching every question, and of drawing his pupils into the most faithful service of this sort, that opened the way for a university in the true sense of that term.

This view has able support. Père Denifle, most exhaustive worker in this particular field, as quoted by Compayré, has said: "That Abelard's method was introduced into the schools and never departed thence can be doubted by none who will compare the works which preceded Abelard with those that succeeded him, notably, the *Questiones*, the *Disputationes*, the *Summe*, composed by the professors of those times. * * * We encounter this method again in the celebrated book which during several centuries has been, as it were, the text of theological instruction, I mean the *Sentences*, by Peter Lombard. The influence of the same method is felt even in the famous work which has been like the code of the schools of canon law, the *Decretals* of Gratian."

To this Compayré adds:

"It is, therefore, permissible to conclude that we are not deceived in attributing to Abelard the first place in a study of the origin of the universities and the causes which gave them birth. Abelard was the real founder of the University of Paris, and by that fact promoter of all the universities created in its image. He was its founder in several ways: At first through his representation, by habituating foreigners to come to Paris for the purpose of studying there, and by assembling vast audiences around him; afterwards by so popularizing the studies and the methods that they were held in honor for centuries in the Parisian schools. He raised the level of instruction by substituting in the place of the old routine of the trivium and the quadrivium * * * the lofty lessons of reasoned theology and abstract philosophy. He was the first professor of superior instruction, and he did his work with an incomparable *éclat*."

"Among his immediate pupils," says Crévier, "were 20 cardinals, 50 bishops and archbishops, and Pope Celestine II."

In like manner, though with characteristic conservatism, Rashdall says: "It was the teaching of William's great pupil and opponent, Abelard, that first attracted students from all parts of Europe and laid the foundation of that unique prestige which the schools of Paris retained throughout the mediæval period. * * * And it was undoubtedly to the intellectual movement of which Abelard is the most conspicuous representative that the rise of the university must ultimately be ascribed."

(3) ECCLESIASTICAL NEEDS WERE ALSO CAUSES.

In the mediæval period diverse opinions in the great field of theology were a source of disturbance that often proved most painful and serious. And this diversity was the result of ignorance on the part of great numbers of the clergy. Paganism, pantheism, materialism, and other "isms," bred or imported, were in perpetual conflict. Heresies abounded. Even the sacred orders within the

church could not always understand the Scriptures exactly alike. There must needs be enlightenment on the one hand or suppression on the other, if the church would avoid the trials and periods of perpetual conflict.

To add to the embarrassments of the time the ghosts of those immortal Greeks, Plato and Aristotle, had appeared, and would not down at the bidding, Aristotle especially possessed for many who could read him an irresistible charm. And the coming by way of the Orient and in Arabian dress, while it gave zest to his appearance, yet, on the other hand, increased the difficulty of making his acquaintance. The printing press had not yet come, and the making of manuscript copies by the thousand was tedious and unsatisfactory. A common center or centers, where the living teacher could in person present, explain, and reinforce or overthrow the resurrected Grecian or any other philosophy whatsoever that had been or might be offered, was a necessity. The means of defense and of propagation were both in high demand, and the church wisely made itself efficient in the work of constituting Paris such a center.

(4) CIVIL GOVERNMENT WAS NO LESS IN NEED.

Kings and emperors must have for support and furtherance men not only richly endowed intellectually, but also thoroughly disciplined and duly versed in a knowledge of the world, past and present, in political and social science, in statesmanship, and in the great art of diplomacy. If only half conscious of this need, there would be more or less of a craving for some high agency or agencies to which the qualification of coworkers could be safely committed. And herein lies the secret of the readiness with which they were often brought into sympathy with generous plans for the founding and protection of institutions of learning.

II.—MORE DIRECT CAUSES.

(1) *National needs and aspirations.*—Whether the needs were at first realized or not, they existed and were bound to manifest themselves to men of necessity concerned in the welfare of their country—even to men selfish in the performance of their functions and desirous of its prosperity on their own account only.

In this case there was at the time of which we are speaking the beginning of a very marked realization of such needs. The few men of genius and learning, of whom mention has already been made, had so brought to light the greatness and glory of other lands as to make thinking Frenchmen everywhere feel that they belonged to a nation of barbarians and to kindle in their hearts earnest aspirations for better conditions. It was a new order of patriotism, and was followed by a new readiness to further agencies that were designed to promote the intellectual development of a people of genius and of great possibilities.

(2) *Municipal ambitions ready to be enlisted.*—Paris was already recognized as one of the choice spots, if not the choicest, in all Europe. Nature had done her very best and left no desirable element wanting. And to all her endowments the genius of men supremely gifted had made beginnings, suggestive to their successors, which have resulted in a city the most charming in the world. But there were those who cherished for their beloved capital a loftier ambition than any that limited itself to supremacy in things material, who entertained the hope of making Paris the recognized seat of intellectual culture for all the nations; and these were ready to join hands as best they could for a beginning that would very surely realize, in course of time, their highest hopes and aspirations.

(3) *The "cradle" already there.*—Not in the school of Remigius, for which

claims have already been made, and who is generally conceded to have been the first master of note who taught at Paris, for the school conducted by him was very certainly connected with a monastery, whereas "the first cradle of the University of Paris" was rather in the non-monastic school conducted by the distinguished William of Champeaux, earliest important promoter of the scholastic philosophy, as before remarked, and who contributed so much to rescue Paris from the humiliating rôle of playing second in the great field of the highest culture to such lesser towns as Tours, Chartres, and Rheims.

In an important sense this Cathedral school was waiting to be made, or rather to be adopted, as the nucleus of a great university. It is not known that he had in view even the outline of such an institution—so grand in scale and purpose—or that anybody else had; but there was the germ, and there at length it fulfilled its high mission.

(4) *Also men for the several departments.*—There also, as in few other places in the world at that time, were the men for the different departments of a great institution—not ready, of course, in the sense of to-day, but in the sense of that day; men as familiar as any of their time with what belonged to the general departments of letters, science, and philosophy; men who perhaps were foremost in the department of medicine, then crude enough in the absence of such modern discoveries as have made it a science; men up to the average, at least, in the department of jurisprudence, if not rivals of the masters who had already made Bologna the world center in law, and men whose eminence in theology had determined the Holy Father to make Paris a universal center for instruction in theology. And if not already at Paris in sufficient numbers to meet every demand, there was no place, as already observed, to which men equal to the high service could more easily be drawn. It is hardly too much to say the learned world was waiting to be called.

II.—WHEN THE UNIVERSITY BEGAN.

The University of Paris began without formal action and developed so quietly as well as gradually at first that it is quite out of the question to name any particular date. What may be assumed as the beginning was not far, however, from the turning point between the twelfth and thirteenth centuries. Soon after the important work of Champeaux, as master of the cathedral school, and of Abelard, as apostle-general, masters multiplied, until there was one at least for school service in connection with about every church in Paris, and there is evidence that as early as the latter half of the twelfth century there was such informal association of masters for mutual advantage and such ingathering of students as would have constituted a university in effect had they been brought into cooperation at a common center. Even without such evidence it is safe to say that the closing years of the twelfth century saw the birth of the University of Paris.

In my judgment, after the most careful consideration of all the evidence within reach, including that offered by those who have written most recently and most fully, there was before the end of the twelfth century neither an organized society or guild of masters, nor any formal association of students, like the "nations" at that time formed at Bologna, and which there shaped the destinies of her university. By "formal" I do not mean provided with written statutes after the fashion of modern times, but simply an association, society, guild or what not, held together most informally by common consent after the manner of mediæval times; and it does not appear that prior to 1200 there was so much of an association, whether of masters or of students, as this. The

authorities, both ecclesiastical and civil, were blindly reaching toward a university through statutes and decrees in favor of teachers and students as being classes of citizens that should have protection and furtherance.

There is evidence, however, that during the latter half of the twelfth century there had been such extraordinary development of the cathedral school that the university working forces concentrated themselves at that center more and more; so that, before formal and definite action of any sort, there was there, as nowhere else in Paris, the actual beginning of university work.

III. HOW THE UNIVERSITY BEGAN.

Unlike the University of Bologna, which, although brought about by a few learned men, chief of whom was Irnerius, took its first step in organization among the students whom they had drawn from many quarters, and which thus naturally took the form of a student university, this one at Paris was begun as a union or society of teachers and was practically a master university.

The more systematic beginning appears to have been made during the first decade of the thirteenth century, and by the adoption of certain statutes, since lost, but which in substance prescribed the dress to be worn by masters, the observance of the accustomed order in lectures and disputations, and the attendance of masters upon the funerals of their fellow-members of the union. In explanation of the narrow range and exceeding simplicity of such statutes, it should be said that they were first regulations only, and such as were in common use in societies of many kinds—religious, benevolent, social, and industrial.

I.—THE UNION OF MASTERS—INTERFERENCES.

There was also, at this time or thereabout, a recognition of the society, tantamount to its incorporation as a university, in the form of two bulls by Innocent III, himself once a master at Paris—the one sanctioning the restoration of an expelled master, and the other authorizing the society to name a syndic or proctor to represent it at the papal court. Independent of any authorization, the Roman law and common usage would have enabled them, as a social or religious guild only, to hold property and transact necessary business. Nevertheless the bulls were important on account of their putting the corporate rights of the society of masters beyond question; and it is not improbable that they were issued with special reference to repeated interference with their rights by the chancellor of the cathedral church, who appears to have been tyrannically disposed.

The conflicts with him had come of too great power on his part, coupled with an inclination to make frequent use of it. He could not only grant or refuse the *licentia docendi*, so absolutely necessary to a master's use of his powers and attainments, at his own will and pleasure, but also, in his capacity as ecclesiastical judge and head of the schools, strip a master of his license once duly conferred, or a student of his privileges as such. More yet; he could enforce his judgments by excommunication and even imprisonment; and with the concurrence of his bishop and chapter issue regulations for the government and discipline of masters and scholars in general. The masters appear to have had these two reserved rights, however: They could refuse to receive into their association, society, or union anyone so licensed who had not complied with its regulations and usages, and could require of a new-comer an oath of obedience to their society regulations when admitted, or "incepted," as the phrase was—i. e., received with certain prescribed formalities at his cost.

No doubt, by way of retaliation for unjust judgments and privileges rendered and conferred by the chancellor, the masters sometimes unjustly dealt with his licensed master ("licentiate"), as they could, if they liked, by refusing to argue with him, if he would not submit to their rules; they could also reject as applicant for admission to their guild, although a master, any student who dared to attend the lectures of a master whom they had deprived of membership.

In this connection there is an interesting fact illustrative of the common experience of mankind, that indulgence in liberal powers tends to an increased desire for power, viz, that, in a year or two after the Pope's formal recognition of the masters as an institution, the chancellor demanded of the masters an oath of obedience to himself. Naturally, the powers at Rome were appealed to and were prompt to correct the abuse, relieving such as had taken the oath already, and forbidding the exaction of such oaths in future. Nor this alone; the Pope's bull of 1212 required the gratuitous granting of licenses deserved, and that they be accorded, not on the chancellor's sole judgment, as theretofore, but on the recommendation of a majority of the masters in any of the professional faculties, or by six selected masters in the Faculty of Arts, three of them to be named by the said faculty itself and three by the chancellor. Yet more, in the righting of wrongs sometimes nothing short of outrageous, there was to be no more imprisonment of scholars for slight offenses (even before conviction), with an appropriation of fines by the chancellor for his own benefit; no more punishment in the form of pecuniary penance, and no refusal to discharge from prison, notwithstanding the offer of sufficient bail.

II.—THE CODE SUPPLIED BY COURÇON.

Moreover, in 1215 all these provisions were embodied in a permanent code imposed by the Cardinal (Robert de Courçon), and the masters were even authorized, within certain limitations, to form statutes for themselves and to administer oaths of obedience to them. But even this extraordinary support of the association of masters failed in large part of practical results. The bishop and chancellor were bent on defeating the purposes of the masters and did not yield obedience to the head of the church, and the old wrongs were continued. Even the efforts of the university men were treated as great offenses and were punished accordingly. The framing and adoption of constitutions, "lawful or unlawful, good or bad," without the approval of the bishop, chapter, or chancellor was prohibited, and finally, under charge of conspiracies, the association was excommunicated en masse.

A bull of Honorius III, issued in 1219 in pursuance of the liberal and consistent course hitherto pursued by the powers at Rome, ordering the immediate abolishment of the chancellor's prison and forbidding the excommunication of the association without a special license, having been disregarded, another, covering the same and other grounds, was issued in 1222.

The ground of these long-continued conflicts lay in the recognition by the bishop and chancellor—by the canons generally, as well—of the important fact that the educational forces gathering at Paris and steadily strengthening themselves by the addition of new masters and students in all the departments, were destined to a degree of independence under a common head, and were also certain to free themselves in time from the ecclesiastical despotism which had been planned. But, on the other hand, Innocent III, Honorius III, and Gregory IX, being more farsighted, and hence realizing that the true way to maintain their influence in a proper degree was to deal liberally with the new organization, stood by it with justice and firmness in every emergency.

III.—ATTEMPTS AT ORGANIZATION—FACULTIES, OFFICERS.

It was about this time that the groupings of masters, according to the subjects taught by them (known as *discipline*), came to be recognized and to be designated as faculties. As the association of masters doing the same sort of work, or laboring in the same special field, was natural, so was it natural, if not inevitable, that they should gradually assume a considerable degree of independence, from their own plans according to special needs, and frame regulations to insure their realization. Hence the term "*facultas*" in the sense of a separate "*scientia*," and in the compound sense of embracing a given field of study, the teachers devoted to instruction therein, and the scholars given to the acquiring of a knowledge of the subjects taught. According to Denifle, the earliest use of the term in this comprehensive sense was by Honorius III, in a missive of February, 1219, addressed to the students at Paris, wherein he lays it down as a rule that the student who has passed the proper examination and received his license might "*libere in ea de qua licentiam obtinuit regere facultate*." Again it was used by him in a missive on May 3, and in a bull on November 22, the same year. And in 1222 it was repeatedly used in this sense by the masters themselves as a body. Denifle also finds, however, that it was occasionally used afterwards to signify a union of the masters of a special "*disciplina*" or department of science. He says:

The *magistri* of each of the separate *discipline* from that earlier time (1215) began to construct separate statute regulations for themselves and to hold separate assemblies. In this they did but continue what they had begun. They instituted examinations binding upon the general membership; they established systems of promotion; they determined conditions under which promoted persons should be incorporated in the general membership; they determined how those already members should be excluded therefrom.

In 1225 for unknown reasons the university seal was broken by papal order. But later (in 1231) still another bull in the interest of the institution was issued by Gregory IX, a bull in which the faculties were dealt with separately and specially. Quite properly it has been styled the *Magna Charta* of the university.

And well it was that the powers at Rome took such action, for meanwhile (in 1229), under advice of the bishop and papal legate, Queen Blanche, acting through the provost of Paris, caused the death of several students on the false assumption of their complicity in a recent riot, and so enraged the university in general that there was a practical dissolution (known in history as the "*General Dispersion*") and a scattering of professors and students to other institutions, both French and foreign, as well as the founding by them of some new ones. By reason of appeals from the Pope, coupled with the punishment of the Bishop and Chancellor of Paris, chief offenders, by diminution of their powers, and with the most solemn promises that every possible satisfaction should be rendered by all parties concerned, a majority of those who had broken away returned and regular work was resumed at Paris.

Among other favorable acts in fulfillment of the Pope's assurances was the issue of a bull in 1237 forbidding unauthorized acts of excommunication, and in which, moreover, the terms "*proctor*" and "*rector*" are so used as to lead to an earlier understanding of their meaning, viz, that "*proctor*" stood for the head of each of the "*nations*," and that the "*rector*" was the one common head over all. These meanings are placed beyond doubt, according to Denifle, by a resolution adopted by the faculty of arts in the year 1244, which subjects offenders against certain regulations to expulsion until "*satisfaction shall have been made to the rector and proctors on behalf of the university, to the full and at their pleasure*." This was in 1245 according to Rashdall, who further notes, as of

the same year, a statute of the whole university in which expulsion is made the penalty "after monition by the rector, or a servant sent by him, or in like manner by the proctors, or a messenger sent by them."

It remains to be said that in 1241, according to Laurie, the faculty of arts had a practical monopoly of the rectorship, since the choice of the incumbent preceptor was made by the common vote of all, and this particular faculty outnumbered all the rest—at least for a time sufficiently long to have the ruling practice become a law. For a considerable time the faculty of theology and the faculty of arts constituted the whole institution and in many things acted jointly; but with the creation of other faculties separateness of action became more and more common, and finally the general rule.

Again, it was not long after the organization of other faculties that a rule of noninterference of one with another in their domestic affairs was adopted—a rule well emphasized in 1259 by a missive from Alexander IX to the Bishop of Paris, requiring him to forbid the members of the faculty of arts from any such interference under penalty of excommunication. There seems to have been nothing like an arraignment of this faculty; indeed the missive disclaims any intent of that sort. It must be explained, therefore, on the ground that said faculty, being at once more numerous and embracing comparatively young men in larger proportions than others, as well as holding relations with the "nations" quite exclusively, would naturally be in greater need of warning. Besides which, the growth of the institution, the incoming of students in great numbers, and new signs of friction had seemed to require that new caution, and in terms not to be mistaken, should be given by the supreme authority.

This missive of Alexander IX is also interesting for the unmistakable evidence it furnishes of the complete separateness and independence of the several faculties as quasi corporate bodies, each of them supreme in its own particular sphere, while constituting an integral part of the university as a whole—the *Universitas Magistrorum et Scholarium*.

A further fact of importance in gaining a correct understanding of the status of the faculties is this, that up to the time we are now concerned with no faculty had a seal of its own. When, in 1255, the faculty of arts published its ordinance setting forth the studies to be embraced therein, it used the seals of each of the four nations; and when the university, as a corporate body, had occasion to make a transfer of property and found itself without a seal it commissioned the masters of the faculty of theology to use their private seals for the purpose. Here we have unmistakable proof that the several "nations" were distinct; that the faculties of arts and of theology were distinct and independent; that the nations did not constitute the university; and that there was a corporate totality correctly entitled "The University of Paris."

The other general officials deserving mention were the procurator, or syndicus; the bedels; the registrar, or scribe; the receiver, and the nuntius.

The procurator, or syndicus, was an advocate or common lawyer, who acted as legal assessor to the chief officer in the university—perhaps also to the heads of faculties and nations. He was later known as *promotor universitatis*; was, in fact, the chief permanent officer, uniting the functions of university counsel with some that pertained to the office of registrar.

The bedel in chief was the officer who, in special dress, and bearing aloft the ponderous mace which represented the authority of the university, preceded the rector on all public occasions and led the way. Besides him there were bedels of secondary and yet lower rank—those who sustained a like relation to the heads of faculties and to the proctors of the nations; and last of all those who served each of the masters, looking after their several lecture rooms,

opening and shutting the door, sweeping out twice a month, strewing the floor with straw in winter, and carrying the doctor's books for him back and forth.

The registrar, as said above, was an officer of later date. As the institution grew he became a necessity, the syndicus being then no longer equal to the extra service which pertains to the office of secretary.

The general nuntius was simply a university messenger, having charge of the messages, and performing other kindred duties imposed by the rector, including the transmission of money and goods sent to students. There were also in course of time nuntii representing scholars of each general district and chosen by them—nuntii majores and nuntii minores. The first named were merchants, or bankers, who assumed to pay money to students as forwarded by their parents from distant regions, or who lent them money on their own account; while those of second rank were plying messengers, actually traversing the country, or even the continent, with consignments of money or goods. In some cases they were charged with the care and safe delivery of younger students themselves.

Subordinates.—Besides the officers, so called, there were several classes of persons under control of the university, and charged with duties not so official in the general sense and yet important. Chief among them were the following:

(1) The librarii, whose work it was to make the sale of books for private individuals, their compensation consisting of a percentage on the sales made.

(2) The stationarii, who performed the several duties of publisher, book-seller, and keeper of a circulating library. The stationarius often employed the persons who wrote the books which were in demand, and would then either sell, or even lend them for a consideration made secure by a sufficient deposit, the amount being determined by a board of university appointment, year by year, composed of four masters and four principal booksellers, who were also made responsible for the absolute correctness of each copy sold or loaned. The stationer must also inform the university in congregation assembled of his desire to sell a given book to a specified stranger, so that if important to do so they could prohibit and prevent its sale. Moreover, to prevent any wrong to those who had intrusted them with the loan of a book or books, booksellers were forbidden to sell such book or books without the owner's consent to another dealer until after a four days' exposure for sale "at the Black Friars' Convent during sermon time."

Under this head Rashdall states, in illustration of the amount of book business done, that "in 1323 there were (in Paris) twenty-eight sworn booksellers, besides keepers of bookstalls in the open, who were intrusted to the sale and loan of books of small value. The statutes required every theologian to bring a copy of the Bible or Sentences with him, at least during the first four years of his attendance. Many college statutes required the student attending logic or philosophy lectures to have a copy of the text."

(3) There was also a troop of parchment makers, illuminators, and binders, as also, later on, paper makers and sellers; all of them, in like manner, under university supervision. According to Rashdall, "the parchment makers were obliged to bring the bales of parchment, on their arrival in Paris, to the Hall of the Mathurines to be 'taxed' or valued by the 'four sworn parchmenters' of the university under supervision of the rector, who also visited the great fair of St. Deny's for the like purpose. The parchment had to remain at the Mathurines for twenty-four hours, during which it might only be sold at the appointed rate to members of the university.

It is also an interesting fact in this connection that after a while, with a greed

not uncommon in those times, a tax upon all parchment sold in Paris became a most important perquisite of the rector's office.

(4) Finally, a class of unlearned surgeons (or *chirurgiens*) and the body of apothecaries were placed under the supervision of the medical faculty, and thus became a means of swelling the ranks of the university men of the time.

IV.—THE NATIONS—ORIGIN, POWERS, ETC.

Hitherto the "nations" have been mentioned incidentally only, because they were not, as at Bologna, the university, in effect, and could be left until we had a quite full understanding of what were the governing elements of the institution. As loose aggregations of students they had existed for some little time. But they found no place in history prior to 1249, and were not so many in number as at Bologna. From the first they were limited to four only, and bore the name, in each case, of the nationality which predominated, viz: The French nation, the Norman, the Picardian, and the English. The Normans and Picards were each limited to their own narrow boundaries, while the French nation included all of the Latin races, and the English nation embraced the Germans and all who came from countries in the north and east of Europe. The numbers were at times very unequal, and such inequalities now and then gave rise to schisms and secessions, with appeals to Rome for independence under a new head and new name. The faculties, especially the faculty of arts, suffered embarrassment from this a number of times, the French members electing a head of their own, and the members of the other three nations agreeing upon some one to represent them collectively. Indeed, such troubles were so common that in 1266, on an appeal to the papal legate from a dissatisfied nation, a constitutional right was granted to secede from the union and to choose a head of its own, subject to the approval of a board of arbitrators composed of three senior theologians and the four senior canonists in the university.

Besides the students in attendance upon the university, the nations included the masters in the faculty of arts. Why these, and none from the faculties of theology, law, or medicine, was for a long time an occasion of no little speculation among those who have interested themselves in the history of the university, but has seemed to me simple enough, and is made very clear by Father Denifle in his exhaustive account.

(1) RELATIONS OF ARTS DEPARTMENT, ONLY, WITH THE NATIONS.

Briefly stated, the reasons for the association of the masters in this one department with the members of the nations, to the exclusion of masters in other faculties, are these: First of all, the studies embraced in the faculty of arts were in those days regarded as only preparatory to the professional courses. Even philosophy, according to its great master, Abelard, was treated as but a stepping-stone to theology. The masters considered themselves as still students, looking higher. Secondly, the nations embraced not a few men of large attainments, brought to Paris for special studies, who found it desirable to share in the advantages of various kinds enjoyed by the national organizations and were in every way worthy associates for the masters in the arts department. They were all learners together. True, there were distinctions made in the practical workings of the national organizations—in the more important affairs, I mean, such as the choice of officers. Here the students without rank or title were without voice. Even the arts masters were themselves subject to limitations as electors in certain cases—e. g., in the choice of the chief officer. It was not enough that they were masters in the faculty of arts; they must either have the degree of bachelor of theology or have gone through

courses of reading in theology, or at least have taught as one of the masters in the arts department for a period of six years. In other words, in order to vote for rector they must have made proficiency in what was regarded the very highest field of study or have made an honorable record in the work of instruction. Thirdly, it becomes plain enough, after a statement of the foregoing facts, why it was that a master or doctor in one of the professional departments was not associated with the masters of arts and the body of students in the nations: He had passed through the more purely disciplinary stage.

(2) ORGANIZATION OF THE FOUR NATIONS.

After much discussion, running through a long period, it may now be considered settled that at the head of each nation, when duly organized, there was a "procurator," and at the head of the several nations, acting in harmony for a common need, there was a "rector."

As already stated, the rector could only be chosen from among and by the masters in the arts department. His functions were, of course, those of a presiding and administrative officer. After a little while he is found also acting as the executive head of the faculty of arts, so that orders and general communications were officially addressed "To the rector, masters, and scholars." By 1289 A. D. he had passed the stage of inferiority to the heads of the professional faculties (because of his connection with the faculty of arts), and was mentioned by the cardinal legate as being properly among them and their equal in rank. He had, in fact, come to a virtual precedence, in spite of the opposition of the chancellor of Notre Dame, who still claimed the sole prerogative of examining bachelors and issuing the license to teach (the *jus ubique docendi*) to "licentiates." And later still, it is not known just when, the departments of jurisprudence and of medicine were brought under his supervision. But it was not until after other years (in 1341) that he also gained recognition as supreme over the faculty of theology (whose dean up to that time had presided over all general assemblies), and thus became rector and acknowledged head of the whole university, entitled, in making university announcements to use the formula, "*Nos rector et universitas magistrorum et scholarium.*"

Quite naturally the faculty of theology had been reluctant to consent to this supremacy, and had succeeded in postponing it thus long. It only came at last through a manifestation of overwhelming odds. The nations and the great faculty of arts were the compelling force, and the Pope himself, seeing the inevitable, in 1358 addressed a bull "To the rectors and masters of the university."

IV.—GENERAL DEVELOPMENT OF THE UNIVERSITY FACULTIES.

We have already seen that the several faculties at Paris were near to each other in the time of their inauguration; that while the faculty of arts and the faculty of theology were practically begun at one and the same time, and were for a while all there was of the institution, the others were not slow in following their example; and that in the matter of a complete organization these last were earlier than the faculty of theology, which seems to have been without a dean of its own until the end of the thirteenth century.

But when all were duly organized, the several faculties were similar in their constitution, had officers that were alike in title and function, were under a common general direction, and worked in harmony as one comprehensive institution.

The several faculties were also alike in the constitution of the professorate; having each of them professors and lecturers, and dividing the first-mentioned class into professors "ordinary" and professors "extraordinary," though inaugurating the latter as giving lectures "cursory"—whether because outside of the fixed and necessary courses, or because less formal in make-up and delivery, does not appear. In the faculties of law the books used as authorities were also treated as "ordinary" and "cursory;" in the faculty of canon law, the ordinary being confined to the *Decretum* of Gratian, while all others were regarded as cursory; or, more correctly speaking, lectures based on other text-books were so designated.

In the other faculties the same books could be made use of in the delivery of lectures both ordinary and cursory; though a distinction was made in the time of delivery, the rule requiring that the ordinary lectures should be given by masters during the morning and on certain days—in the faculty of arts during the earliest hour—and further providing that in summer the ordinary lectures might continue longer than in winter, even until the hour for dinner. Lectures by masters of theology and of canon law were also given in the morning; and the former were expected to choose an hour later than that assigned to the masters in the faculty of arts, in order that these last could attend the theological lectures after the delivery of their own, should they desire.

At first the ordinary lectures were, as a rule, given by masters and doctors, but after a while by bachelors as well; in course of time the teaching in the faculty of theology was "almost entirely abandoned" to bachelors; and the lectures were often, quite contrary to the general rule concerning ordinary lectures, given in the afternoon. Except on particular holidays, cursory lectures could be delivered at any time when ordinary lectures were not in progress, whether by a master or a bachelor. Moreover, in vacation, when the ordinary lectures had been discontinued, as usual, cursory lectures, when not contrary to the usage concerning holidays, could be given at any hour of the day.

As relates to place, cursory lectures had the advantage of being deliverable anywhere, whereas ordinary lectures must as a rule be given in the recognized halls of the faculty or nation to which the lecturer or at least the subject belonged.

Originally the little island in the very heart of the city, and on which Notre Dame was built, had been the center of school work; but in course of time, as they multiplied, the schools crossed over the stream and spread themselves over a wide area. At the time now under consideration they were mostly in the Rue du Fouarre, and it will be interesting to take a peep at some of them at the hour of beginning work in the morning. But in order to do this there must be early rising, for, though the dawn has not fully come, the bells of Notre Dame have sounded and the thousands of students from all the countries of Europe have taken warning and are already gathering from river sides and the surrounding heights. The street has been closed to wagons and whatever else would disturb the coming lecturers. The sturdy gatemens are busy opening and closing the great doors for the eager throng, some plainly and some richly clad, with daggers and poniards in view, and all of them with note-book in hand, besides a manuscript copy of the author to be interpreted, if able to buy or borrow one.

Entering the school most conveniently reached, we find the professor already at his rude desk and the throng of students crowded together on the ground, with note-book and pencil in hand, ready for the first word of the lecture after the morning's thanksgiving. It seems that the lecturer belongs to the faculty of arts, for he wears a black gown reaching down to his heels, and before him

are several text-books," as is common with members of that faculty. The students are on the ground instead of benches or chairs, first, because it is cheaper; secondly, because it is wholesome to keep as near as may be to Mother Earth; and, lastly, "that they may escape all temptation to pride."

And now the lecture begins, for it is full 6 o'clock, and at 9 the hall will be needed for other lecturers. His reading is from one of Aristotle's philosophies, and at the mention of that great master's name every face brightens and every eye kindles with a new light. The reading is slow and with the most distinct utterance, while the pencils are exceedingly active the moment the professor's interpretations and comments begin, that no word may be lost. The *tout ensemble* is deeply interesting, and if we each had a comfortable seat we should be loath to leave until night. But the hour of 9 has struck and we reluctantly go forth.

I.—FACULTY OF ARTS.

As in most American colleges and so-called universities of to-day, the faculty of arts in the University of Paris was of a mixed character, including so large a proportion of youthful students doing much elementary, as well as those doing secondary or college and university work proper, as we would term it nowadays, that it never attained to a rank beyond the secondary, in the view of those who were connected with the professional departments. And this, notwithstanding its supremacy by reason of greater numbers, and its direct association with the "nations" in matters of general administration.

As relates to the courses of instruction, such a thing as a definite curriculum seems not to have been thought of until some years after the first beginnings of the institution. Each teacher gave himself to instruction in what he assumed to have superior knowledge and drew together pupils as he could, and taught them in his own fashion. But all were careful to present, not their own ideas and results of their own inquiries and original investigations, but simply what some authority had said of the subject. The methods of Irnerius and Abelard involved some originality of powers and a great amount of intellectual labor.

The first step in the matter of a grouping of studies other than that of their division into trivium and quadrivium is credited to the Cardinal-Legate Robert de Courçon. Whether he was an Englishman or not is of small consequence. His plan of studies, examinations, and rewards was a decided innovation upon the time-worn rule of no rule, and entitles him to enduring honors. The revolution which led to real university work came of the intense interest in dialectics aroused by Abelard. As a study prominent in the field of the trivium, it rose at once to a new dignity, and did great service in partially rescuing the learned world from the ancient habit of accepting without examination. Of course none of the old-time studies were omitted. The changes were in the proportion of time accorded to them, respectively. Thus, instruction in the Latin language was limited to grammar, and it was to be taught from the text-books of the Priscians—great favorites at that time. In the field of rhetoric, little or no attention was given to the orators, poets, or historians of old Rome, and philosophy was made to include the several fields of arithmetic, geometry, music, and astrology—in other words, the entire quadrivium, though without specification of the authors recognized—besides that vast field which of necessity embraced metaphysics, ethics, and natural philosophy.

Doubtless there were many text-books for some of the branches taught, but in logic and philosophy Aristotle was regarded as so supreme that there seem to have been no scholars bold enough to make even an effort at competition. There were those who offered introductions to his several great works, as well as others who annotated and interpreted them; and there were competitors

in the translation of them, from both the Greek and the Arabic, into the Latin as well as into modern tongues. For example, they had his old work on dialectics (then known as "the new logic") Latinized by Boethius, with portions of the *Organon* interpreted by Porphyry; the *Categories*, translated into Latin by Victorinus; annotations of the *Categories* by Boethius. They also used the *Nicomachean Ethics* of Aristotle, but not his *Metaphysics*, or his *Natural Philosophy*. Courçon was so far controlled by his conservative theology that he even forbade their use in the following terms: "Let no one read either the *Metaphysics* or the *Natural Philosophy* of Aristotle, or the abridgments of those works; nor the writings of David Dinant, the heretic Amauri, or the Spaniard Mauricius." As a matter of course the rejected works were bound to gain acceptance when better understood and universally desired. Even the bull of Gregory IX, in 1231, excluding his works on natural philosophy "until they shall have been examined and expurgated," could not long hinder their use. Consequently his *Physics*, the use of which had been prohibited under penalty of excommunication up to 1255; they, too, with his *de Animalibus* and his work on the soul, were officially approved. This made his victory complete. He was now supreme in the world of letters, science, and philosophy, and so remained right through the centuries.

The statute which next followed that of Courçon (1215 A. D.) came in 1254, and gives us more definite information, while at the same time furnishing gratifying evidence of a larger liberality. Besides Aristotle's *Logic*, prior and posterior, and his *Ethics*, it expressly names *Physica*, *Metaphysica*, *de Anima*, *de Animalibus*, *de Generatione*, *de Sensu*, *de Sensato*, *de Somno et Vigilia*, *de Memoria at. Reminiscentia*, *de Morte et Vita*, *de coelo et Mundo*, the spurious *Liber de Causis* (saying nothing of his *Politics*, *Economics*, and *Rhetoric*, all of which there is good reason to believe were actually taught), and even the *de Plantis*, of quite doubtful origin, and another translation from the Arabic known as *de Differentia Spiritus et Animæ*; while in grammar and rhetoric the *Sex Principia* of Gilbertus Porretanus, as well as the *Divisions and Topics* of Boethius, and the *Barbarismus* of Donatus are added to the works of the two Priscians.

These statutes also fixed the amount of time that could be given to the several studies, and were careful to devote a large portion of it to dialectics. In the language of Compayré—

Logic manifestly held the first place. To reason well had become the first duty of the studious man. There was no thought of knowing the history of humanity, still less of observing the phenomena of nature. If rhetoric was occasionally taken up, it was in order to draw from it certain rules of pure form, not to seek insight into the beauties of pure literature. The masterpieces of classic antiquity were unknown. Dialectics had invaded all things; the syllogism was of universal application.

Few changes were made in the studies regularly pursued during the next hundred years. The revision made by Cardinal St. Marc and Montaigne, in 1366, only substituted Alexandre de la Villedieu's *Doctrinale Puerorum* for Priscian's grammar, which held its ground to the end of the mediæval period.

Rashdall suggests that a considerable number of text-books less important than those above mentioned were also in use, since they are positively known to have been used in German schools during the period we are dealing with, which schools were chiefly planned and conducted after Parisian usage. Accepting this conclusion as justifiable, we may add the *de Consolatione Philosophiæ*, other of the more popular treatises of Boethius, and various logical text-books prepared by representatives of the different schools of mediæval thought and so composed as to meet the needs of beginners in logic.

As relates to the distribution of studies in the courses prescribed for the Faculty of Arts, and the conditions to be fulfilled by candidates for the baccalaureate, for licentiate honors, and for the mastership, it may be sufficient to say, that during this period (later in the thirteenth and throughout the fourteenth centuries), the candidate for the "determinance"—that is, for the degree of bachelor of arts, "must have studied," to use the words of Compayré "either in ordinary or extraordinary courses, all of Aristotle's works on logic, Priscian's grammar, Boethius's Divisions and Topics, Donatus's Barbarisms, and the Six Principles of Gilbert de la Porrée."

The same author, in a more exhaustive treatment of the subject, states that a candidate for the degree of A. B. must have passed a satisfactory examination in "grammar, logic, and psychology," have attended disputations throughout "one grand ordinary" [course], and himself responded in at least two disputations. He also says that, for the licentiate (the license to teach), a candidate was required to satisfy the examining board that, besides all the requisites to the bachelor's degree, he had added natural philosophy. He adds more fully: "Aspirants to the licentiate's degree must have studied the same books (those requisite to the bachelorship), and, further, must have heard Aristotle's treatises on physics, psychology, and ethics. They must also have attended a hundred lectures on mathematics and astronomy."

For the degree of master of arts, yet other attainments were necessary—at least a completion of the course in natural philosophy and moral philosophy.

A decision as to the qualifications of a candidate for B. A. was finally reached only after, first, a preliminary test, known as "responson," in which he disputed in both grammar and logic with a master; and, secondly, after a satisfactory issue of the disputation, an examination entitled the "examen baccalaudorum," conducted by a board of examiners appointed by each of the nations for its own candidates. The examination was also a double test. There was, first, an examination by questions and demonstrations in the studies scheduled by his masters, as well as a careful inquiry into the faithfulness of his attendance upon the lectures given. If he passed all these he was then admitted to "determine," and could give cursory lectures should an opportunity offer, after taking the oath of obedience to the rector and faculty and to his proctor and nation. The ceremony of admitting the candidate into ranks of the bachelors consisted chiefly of receiving the bachelor's cappa, putting it on, and taking his seat for the first time among his comrades. But there was also a festive demonstration on the day of determination. Great effort was made by the new bachelors and their friends to fill the halls used for the occasion and to secure the attendance of as many dignitaries as possible—seizure of passers-by and literal compulsion being sometimes resorted to. The day ended with processions and feasting at the cost of the determiners, who were also expected to pay the master under whom they had more especially studied and determined for the use of his schoolrooms.

For the higher honors analogous tests were required, and like demonstrations (though on a more liberal scale and with something more of dignity) were made in honor of the newly made licentiates and masters; but in their case the honor was that of "inception" instead of "determination."

I should not omit to state that, while control of the university in general was slowly passing from the hands of the chancellor of the cathedral, he still held on to the right of examination for the licentiate. So that only after the determiner had completed some six years of study, had finished all the books prescribed by the faculty, had taken part in a given number of disputations, given a course of "cursory" lectures, and reached the age of 20 could he present himself for the licentiate's examination. This, although at first serious, as con-

ducted by the chancellor and four examiners in the studies, and by tests of ability in the giving of lectures and other forms of discourse, gradually lessened in its demands as confidence in the work of the masters increased and the responsibilities of the chancellor diminished.

After examination the successful candidates for the *licentia docendi* were sent to the chancellor in groups of a convenient number, their names being arranged in the order of merit, "The only approach," as Rashdall says, "to a competitive examination which the Parisian University admitted." He also says of the formalities attending the license:

On the day appointed for the conferment of the license the successful candidates in full academical dress (*cappati*) proceeded in state from the Mathurine Convent to the Episcopal Palace or the Abbey of St. Geneviève, as the case might be, accompanied by the rector and proctors and preceded by the bedels of the faculty. They were then presented to the chancellor, and, after the formal "collations" (expositions or lectures), * * * received kneeling before him the solemn license, in the name of the Trinity, to incept or begin to teach in the faculty of arts, together with the apostolic benediction. * * * Before the actual ceremony of the *birettatio* the licentiate had to appear before a congregation of his nation and obtain its placet for his promotion. This being granted he was immediately sworn to obey the rector and his faculty and nation and to do or abstain from doing scores of things which had from time to time been enjoined or forbidden by the university faculty or nation. The evening of the day before the inceptation he took part in a peculiarly solemn disputation known as his "vespers." He was then free to give his formal inaugural lecture, or rather disputation, in the presence of the faculty, to receive the magisterial *biretta* and the book from the hands of the presiding regent, to receive the kiss of fellowship, and to take his seat upon the magisterial cathedra.

In the evening a banquet to the masters and others, at the expense of the inceptors, was given, as in the case of bachelors.

That there was much laxity in the examinations as time went on, as well as partiality based on the rank and assumed personal importance of candidates for degrees, is very certain. The records of statutes and manifestoes against unreasonable and grossly unjust practices in these regards would furnish ample proof of the correctness of this judgment if there were none other.

METHODS OF INSTRUCTION IN ARTS.

Having informed ourselves upon the subjects taught in the faculty of arts and concerning the authorities followed in the study of them, as well as upon the conditions to be fulfilled in acquiring academic titles, we naturally turn to the methods employed by those who taught. Before the day of Irnerius and Abelard the instruction of the schools generally, whether academic or professional, was about as dry, unphilosophical, and ineffectual as could be imagined, resting as it did upon an unvarying confidence in the correctness of the author and teacher followed, and upon unending repetitions by the scholar as a means of fixing the substance, and as far as feasible the very words of the instruction received, in the mind of the student. The reasoning faculty was in a large measure distrusted and the demands made upon it were correspondingly few, and naturally this was more especially the case where the subject considered was concerned with long-established convictions or a blind and determined acceptance of assumed truth, whether historic, scientific, social, political, or religious. The text-book appears to have been blindly accepted as final authority, just as was the case with the Bible in the theological world.

According to Thurot and Mullinger, both of whom gave much time to a study of this general subject, there were two very distinct and different methods, expressed by the terms *expositio* and *questions*; the first consisting in a critical and thorough examination, analysis, or dissection of the text; the second, in

discussing it, up and down, through and through, pro and con. In using the first method the lecturer, according to Thurot, as translated by Mullinger and quoted by Compayré, "commenced by discussing a few general questions having reference to the treatise which he was called upon to explain, and in the customary Aristotelian fashion treated of its material, formal, final, and efficient causes. He pointed out the principal divisions, took the first division and subdivided it, divided again the subdivision, and repeated the process until he had subdivided it to the first chapter. He then again divided, until he had reached a subdivision which included only a single sentence or complete idea. He finally took this sentence and expressed it in other terms which might serve to make the conception more clear. He never passed from one part of the work to another, from one chapter to another, or even from one sentence to another, without a minute analysis of the reasons for which each division, chapter, or sentence was placed after that by which it was immediately preceded." It was by this slow and painful process of systematic analysis of the precise subject in hand that the professor hoped to fasten upon the minds of his hearers a knowledge of it.

On the other hand, what may be called the Abelardian method was that of applying to all questions admitting of a possible query the test of *sic* and *non* as employed by him. It was the method of the rack. If a portion of the text allowed a double interpretation, the opposing views were represented by opposing arguments logically framed and provoked to an exhausting conflict, like two contending armies, and with the least possible sympathy or prejudice. Last of all, having covered the ground pro and con, the professor presented his own view, supported and urged by such arguments, syllogistically ordered, as he could muster, though unfortunately without venturing much into the field of observation and experience.

As was said again by Thurot, "the distinction characteristic of instruction in the Middle Ages is, that science was not taught directly and in itself, but by the explanation of books which derived their authority solely from their writers."

Criticism of this method of instruction has been so well expressed by Compayré that I quote him freely:

But that in the middle ages so many successive generations of laborious and studious men should have consented for centuries to grow pale over a small number of texts, always the same, reread and commented to satiety, gnawing, as it were, at the same bone forever, is a thing that can only be explained by supposing a special cast of mind, an extraordinary intellectual passivity, a complete absence of initiative and spontaneity. Since there were hardly any books, it seems as if it would have been so simple to turn to another side and study things in themselves; to open, in fine, the great book of nature. But no; men preferred to keep on repeating, mechanically and laboriously, paraphrases scrutinized a hundred times already; to close their eyes to the realities of the world, in order to concentrate them * * * on certain pages of marvelously bad Latin. * * * It would not have been so bad had they clung to the spirit of an author in studying him. But no; it was the letter, the literal form, which they scrutinized. * * * The other characteristic of the pedagogy of the middle ages, its mania, was the taste, or rather passion, for disputation. Really independent researches being forbidden, discussion, by bringing two different and contrary interpretations into opposition, gave both scholars and masters at least the shadow of liberty of thought. Never has there been such an abuse of argumentation. When the sixteenth century brought into the world another spirit and better methods, it found all the educational institutions transformed into fencing schools of dialectics. "They dispute before dinner," said Vives, in 1531; "they dispute during dinner; they dispute after dinner; they dispute in private and in public, at all times and in every place." * * * They gave their adversary no time to explain himself. If he entered into any developments, they cried, "To the point! To the point! Reply categorically!" They had

no concern for truth, but sought merely to defend their opinions. Is a man too hard pressed, he eludes the objection by force of obstinacy; he denies insolently; he blindly strikes down all opposition in despite of evidence.

Dealing with method on the side of delivery, we find that, too, a matter of peculiar interest, though less important of course. Efforts were made for a long time to regulate delivery by legal enactments. Nevertheless the lecturers, the students, and the public had their own way in the end. The notion of the law-makers was that delivery of all the lectures should be extempore instead of by reading from a manuscript. They even ventured to determine the slowness or rapidity of utterance, and were bold to make known their disapproval of a drawling delivery and their will that it should be rapid, regardless of the convenience of note takers on the ground or on benches before them. This requirement was so opposed by the students that, as might have been expected of the times and circumstances, statutes with severe penalties became necessary to protect the offending lecturer from shoutings, hissings, and the throwing of sticks, and even stones, by students and their sympathizers; rude practices which had the effect in time to first soften and finally repeal all such enactments, and of course to modify the manner of the professors and other lecturers.

II.—THE FACULTY OF THEOLOGY.

Among the special, professional, or "superior" faculties at Paris theology ranked first on several accounts: It was first to form and enter upon its work, first in the plans and purposes of the ruling powers, first in the recognized rank and importance of its subject and object, and, as a matter of fact, first in the attention it received in all quarters and in the patronage it enjoyed. It was the purpose of the church to make it the leading school of theology in the world, and it did not fail. It was accorded the rank of *facultas prima et sacra et suprema*. Said Jacques de Vitry:

Logic is good, for it teaches us to distinguish truth from falsehood; grammar is good, for it teaches how to speak and write correctly; rhetoric is good, for it teaches how to speak elegantly and to persuade. Good, too, are geometry, which teaches how to measure the earth, the domain of our bodies; arithmetic, or the art of computing, which enables us to estimate the fewness of our days; music, which reminds us of the sweet church of the blessed; astronomy, which causes us to consider the celestial bodies and the stars shining resplendently before God. But better is theology, which alone can be truly called a liberal art, since it alone delivers from its woes the human soul.

All the more attention and effort were given to the Parisian faculty of theology, because it was the fixed purpose of the church to make it an ideal faculty—the type to be followed by the other theological schools of Europe, some of which were already half planned in outline, and a considerable number of which were established not many years later.

In origin and constitution it was in fact what Thurot styled it, "a federation of religious and secular communities," and yet with so great a predominance of the representatives of the religious orders, after a little time, as to arouse the seculars, both in the theological faculty and in the faculty of arts.

By the middle of the first century of the university life a very large majority of both masters and students were members of one or another of the religious orders; the Dominicans, Franciscans, Carmelites, Augustines, and Jacobins predominating. Indeed a great many of the convents had public chairs of theology, whose incumbents were also representatives in the university faculty—according to Compayré, 9 out of every 12, as early as 1253. And so with the students who aspired to the license and the doctorate, a majority were members of mendicant orders. The Dominicans were especially fortunate in

filling two chairs of theology in their convent with "the universal doctor," Albertus Magnus, and "the angel of the schools," Thomas Aquinas. These and other conventual professors of theology did not go to the university; the university went to them. As new religious orders were founded from time to time new chairs of theology were founded in their convents, and thus the faculty of theology, with its multiplying numbers in all the convents throughout the city, steadily gained in strength.

But this faculty had also its secular side, which grew in like manner; including, as it did, a number of colleges, with chairs of theology free from any control of religious orders, and for this reason known as secular. Two of these colleges became especially distinguished and practically powerful—the College of the Sorbonne and the College of Navarre. The first of these took its name from its founder, Robert de Sorbon, chaplain to Louis IX. Concerning the date of its founding and organization authors differ. Accepting Duvernet (*Histoire de la Sorbonne*, 2 vols., 1790), I name 1252; also as date of its charter 1253, and of its confirmation by Pope Clement IV 1268. It had provision for 16 poor students in theology, to be taught by secular priests, the four nations being equally represented. Formal cession was made of a house in a desirable quarter of the city by the King in 1257. It was founded in a truly Christian spirit of benevolence for poor students of high promise, under the title "Congregation of poor masters of the Sorbonne," and quite soon grew to such importance in the estimation of all parties concerned as to make itself by common consent the center and seat of the faculty of theology. The College of Navarre was of later date, having been founded in 1304 on the heights of St. Geneviève, already made famous by Queen Jeanne of Navarre, wife of Philip the Fair. It was planned for 70 poor students, 20 of them to be theologians. At an early date it took the second rank after the Sorbonne; and, according to Thurot, these two "were almost a match by themselves alone for the religious orders. They gave the faculty of theology the greater number and the most distinguished of its secular members."

Fitness for admission to the theological courses implied the title of B. A. already won and the right to claim an examination for the *licentia docendi*, which meant a term of five or eight years of uninterrupted study, according to whether the candidate was to give private or public courses of lectures. By a statute of revision enacted in 1366 (an act entitled "The Reform"), the full course for the degree of doctor of theology was extended to sixteen years—in 1452 reduced to fifteen.

It should be remarked, however, that a distinction was made in the case of the giving of private lectures, for which last a five years' course sufficed as a qualification. No matter what the attainments of a candidate, the doctorate in theology could not be reached before the end of his thirty-fifth year. According to Rashdall, "there were practically three distinct degrees of bachelorship, to the first two of which there was a regular admission quite as formal as the single admission to read cursory lectures in the other faculties, the same being as follows: (1) *Biblicus Ordinarius*, or *Cursor* (according as the candidate was regular or secular); (2) *Sententiarius*; (3) *Baccalaureus Formatus*." The last was accorded to such bachelors only as had completed their course in the *Sentences*.

The text-books were few—so few that the Holy Bible and Peter Lombard's book of "*Sentences*" leave almost nothing to be added. The *Sentences* was a full and complete treatise, composed of systematically arranged sentences and maxims, taken from the Bible and the writings of the Fathers, and grouped in four parts, the first treating of the Trinity; the second, of the creation and of

the relation between the invisible and the visible worlds; the third, of sin and redemption, faith, hope, and the other virtues; the fourth, of the sacraments.

The statutes of 1366 required the reading of this book, passage by passage, and the exposition of it in every part, and they who were found to have done this in addition to every other requirement were accordingly designated as *sententarii*. Of course there were original expositions without number by bachelors, *sententarii*, and doctors.

All this indicates the character of the instruction, and that it was not altogether in form and manner like that in the other faculties. As a matter of fact, it was mostly given by teachers of secondary rank in the form of cursory lectures, the doctors keeping a general oversight, giving ordinary lectures now and then on the most important subjects, and having special supervision and direction of disputations, examinations, and other meetings where members of the faculty were to have the responsible part. The distinction between lectures ordinary and cursory, or extraordinary, gradually disappeared for the most part, so that doctors lectured once or twice annually as a condition of holding on to their regency, and those of lesser rank were allowed or required to keep up the programme of lectures ordinary.

Besides the lecture method of instruction, there was also employed a system of questions and answers. Some writers have made it appear the chief means of instruction. They who employed this method sometimes put questions of their own and wrestled with the answering student. But oftener than otherwise they arrayed the differing authorities against each other, pushing the argument for and against in regular syllogistic fashion. Of course in the last-mentioned case there was less of spirit, since for the most part the whole was read from the manuscript of the speaker, or from some other man's, for it is said that now and then an exceptionally lazy lecturer would venture to borrow a discourse.

Cr  vier is credited by Compayr   with having made an especially clear statement of the character of the theological instruction of the middle ages in general, which, as said before, was after the Parisian type almost universally.

According to him [says Compayr  ] scholastic theology must have had three principal characteristics: First, it reunited in one body of doctrine or one general system all questions relating to religion; such is, in fact, the essential merit of the book of the *Sentences*. Second, it treated these questions not by authority alone, but in part by reassuring, on conditions, be it understood, that the ever-docile reason should submit itself to the demonstration of traditional beliefs; as soon as one departed from tradition he was denounced as heretical and counted as naught. * * * Finally it employed the "geometric style," and proceeded by axioms, theorems, and corollaries. Founded on revealed truth, on dogmas whose authority no one then dreamed of contesting, theology could in fact, like geometry, which rests on self-evident principles, be built up entirely by pure deduction and rest on syllogisms. No appeal was made to feeling, * * * just as no appeal was made to experience in teaching philosophy. There being no criterion of truth but the agreement between consequences and principles admitted as beyond discussion, there resulted an apparently rigorous body of instruction, solid in proportion as the bases of its perpetual reasoning were solid, but desperately dry, and as cold as geometry.

Not only this, but the instruction so-called occupied itself with a multitude of useless and sometimes senseless questions and vain attempts at their solution, such as these, for example: "Is it of the divine essence to engender or to be engendered?" "What do the angels do with the bodies of which they have made use to fulfill a mission upon earth?" "What was the color of the Virgin's skin?" "What is the interior structure of Paradise?"

The theological teaching at Paris and elsewhere during the period with which we are dealing has by some authors been highly commended, on the other hand,

for its recognition of the profoundest philosophies of the ancient times, especially of Aristotle's. There are two views to be taken of this also. Sincere and earnest philosophic inquiry in the true spirit of philosophy, and hence with really important ends in view, and with the use of the best methods known, even though carried to an extreme, is better than studies and discourses based on sheer curiosity. But in the theological schools of the middle ages there was also a study of philosophy that was not philosophy, and a use of methods that were not philosophic, because of an ungoverned passion totally incompatible with the inculcation of such spiritual truths as were taught by Christ and are essential to the welfare and final redemption of mankind. Dissertation on dissertation, commentaries on commentaries, were so piled, heap on heap, that the Sacred Scriptures were almost forgotten. No wonder that Petrarch on casting about him said:

Look at these men who spend their whole life in altercations, sophistical subtleties, in incessantly turning their brains upside down in order to solve empty little questions; and accept as true my prophecy concerning their future. Their reputation will pass away with their existence, and the same sepulcher will suffice to enshrine their names and their bones.

And no wonder that the more spiritual-minded of the Popes bewailed it, and spoke of many as visionaries.

Nevertheless there were men in those very times and in the faculty of theology who were not only profoundly learned but deeply moved by the noblest and highest of aims and aspirations, men whose lives and labors sufficed to gain for it supreme honors in the theological world of that period.

The several stages of the theological student during his rather lengthy term of sixteen years are not without interest. This was about the course pursued: For a period of six years he did nothing but read and listen; the first four being given to attendance upon lectures on the Scriptures, the other two to the Sentences of Peter Lombard. If at the end of this period he had attained the age of 25, he could appear before the faculty with certificates of faithful attendance upon the instruction given him and apply for the examination requisite to the first of the bachelor degrees, that of *Biblicus Ordinarius*, or *Cursor*, which test was given by four doctors. If successful he was presented to the dean of the faculty to receive the token of his bachelorship, to be permitted to deliver his first public lecture, known as the *principium*, and afterwards to enter upon the delivery of his first year's course of lectures on a single book of the Bible. The next year was given to a like course on another book. If a secular his courses were treated as extraordinary or cursory, and if a bachelor he was entitled a *cursor*. As a rule he was then anxious to get away from the mere Biblical work, and into the field beyond, where he could exercise his logical powers and try his philosophy on the more available themes presented by the scholastic theologians. Undeniably it was by the self-denying members of the religious orders that the truly religious work of both study and instruction was mostly done.

In the ninth year of his course came an important trial known as the "tentative." It was a disputation at which a master presided and supplied the subject of debate. His opponents were a given number of bachelors of divinity waiting for the "formati" license. After the disputation they submitted their judgment of his part to the master who, if concurring, was pleased to announce the fact and to declare him *ingeniosus et doctissimus*.

Next followed the reading of the Sentences, the student making his entrance upon each of the four books an occasion for delivering a solemn public discourse known as "the *principium*," to which all the doctors of the faculty were formally invited by the *bedel*, and at which one at least was in duty bound to be present, in order to make a reliable report of the candidate's performance. It also ap-

pears that it was not uncommon on such occasions to indulge in a little drinking of beer at the lecturer's expense, by way of congratulating him on his success. There was sometimes a considerable number of candidates for this degree, all of whom followed each other with their principia in some systematic order.

Our candidate, now a *sententiarius*, went forward with his reading and discussion of the sentences until his completion of the fourth book, when he had, or gave, another *principium*, and received the third of the bachelor's degrees, the *baccalarius formatus*, from which forward until the granting of the license, which awaited him at the end of three or four years, he was to remain in Paris, taking part in public acts of the faculty, holding public discussions, preaching a university sermon as required, holding conferences, etc.

Some idea of the spirit which pervaded even the schools of theology in these times may be gained from the following reference to one of the many disputations in which the bachelor candidate for the final license is required to take part:

A certain amount of animal combativeness and physical endurance was almost as necessary in the "warfare of the schools" as in a tilt or a tournament. At this disputation, known as the "sorbonic," from its taking place in the Hall of the Sorbonne, the respondent was required to reply standing alone (and without the assistance of any moderator, or judge, except an audience which occasionally signified its approval or disapproval by stamping or clapping) against a succession of opponents, who relieved each other at intervals from six in the morning till six in the evening, an hour's relaxation only being allowed for refreshments in the middle of the day.

He was preparing for service in the "church militant."

The last of the honors provided for the student of theology—those of licentiate, master, and doctor of divinity, which seem to have been practically synonymous, were conferred only on, or near, All Saints' Day in every alternate year at what was known as the "Jubilee." It was made a great occasion, and there had been from the beginning of the university a quite serious difference between the faculties and the chancellor of the cathedral as to who should have the chief part in the examination and approval of the candidate, as well as in the final ceremonial. In the matter of deciding the fate of candidates the faculty of theology at last prevailed, so that before the end of the fourteenth century the examination in the bishop's hall was nothing more than the merest formality. It was little more than this anywhere, and very naturally, in view of the many tests which the candidate had passed during the long period of his studentship. It amounted to little more than an inquiry into the term of his residence, the performance of all duties enjoined by the university statutes, and whether his capacity and powers, character, and orthodoxy fairly entitled him to the final degree. But the examination, such as it was, was conducted by the faculty, the members of which as a body at the proper time recommended the approved candidate to the chancellor.

There was talk among the more exacting friends of learning that, in time, standards here as well as in other faculties declined; but, on the other hand, the researches of historians have found very gratifying evidence of a regard for the dignity and value, if not sacredness, of the D. D. degree which should put to shame more than one modern institution of high pretensions, in that such honors were now and then firmly refused to the coveting sons of princes and kings who were found wanting in qualifications.

As regards the ceremony of conferring the title it is sufficient to say that in pomp and assumed importance it exceeded anything indulged in by the other faculties. A messenger of the chancellor, bearing the high-sounding title of *paranympus*, who was sent to notify the rector of the university and to invite the attendance of all the *licentiandi* who had passed the examination, dis-

charged that duty on the day previous, in his velvet cap and scarlet robe, making an address in extravagant glorification of science, and finally presenting the "signeta" bearing the names of the candidates whom the chancellor was to honor. There were also on this occasion duties for the candidate at his own house in the form of a reception to his friends with hearty welcomes and ample supplies of cake and wine, to say nothing of the unwarrantable fees for the chancellor, paranympus, and others, with which the messenger was to return at the end of the day. Finally the candidates themselves went in person to invite the lords and canons to the commencement.

The ceremony itself, known as the *aulatio* of the new D. D., was conducted in the Bishop's Hall by the chancellor, who, having pronounced the formal words, *Incipiatis in nomine Patris, Filii, et Spiritus Sancti, Amen*, crowned the licentiate with the *birettum doctorale*. But this was not the end with him who had thus been received into the honored ranks of the D. D.'s. He must then mount his cathedra, deliver an address in praise of the Scriptures, maintain himself in a disputation, called the *aulica*, in which, by formal assignment, the chancellor, the presiding master, other masters, and a bachelor were expected to take part.

Last of all, at the beginning of the next academical year the new doctor, having shared in still another disputation, was admitted to the regency with the fullest authority to teach and to preach as he might desire and occasion should offer.

III.—THE FACULTY OF LAW.

Law as a science, and the teaching of law, had their throne in Italy, where indeed they may also be said to have had their origin. It was Italy that produced Irnerius, the reviver of the civil law after the period of the dark ages, and its chief promulgator through the University of Bologna. It was in Italy also that the teaching of the civil law, as nowhere else, was favored by imperial and Papal powers. And finally it was Italy that gave to the world the renowned Gratian, founder of the science of canon law, and his everywhere accepted *Decretum*, the *Concordantia discordantium canonum*, but for which the theological world might have groped in the mist of uncertainties for yet other centuries.

(1) The civil law, as already remarked, was less favored in France. Its teachings came to prominence after awhile at Montpellier, but at Paris it gained but a slight footing, not only because there was less taste for it as a science in western Europe, but for the reasons that the theological forces of the whole Christian world, having determined upon Paris as their chief center, were jealous of a science capable of arousing such enthusiasm as had gathered thousands upon thousands of law students at Bologna, and because by this time the church had become anxious lest a study of the civil law should prove a hindrance, if not a menace, to its own great cause, the progress of Christianity in the world.

This anxiety of the church had already become so great, even in the early part of the thirteenth century, as to have led the head of the church at Rome to issue a decree prohibiting the teaching of civil law in any institution over which the Church of Rome had jurisdiction. The civil lawyer was regarded as hostile to the church, so hostile that, according to John of Salisbury, many of his contemporaries destroyed by fire all the civil-law manuscripts that fell into their hands. Worse than this, even Papal bulls were again issued, prohibiting the teaching of civil law—that of Pope Honorius III, in 1220, limiting itself to Paris and the neighboring cities, and that of Innocent IV, in 1254, covering the whole of France.

The reasons urged were, in substance, first, the uselessness of the study, and,

secondly, that the study of civil law would be a hindrance to theological studies and promulgations. Thus Honorius III insisted that, while the church did not wish to reject the "docile cooperation of the secular laws," yet since in France and other parts governed by the common law there was no use of the Roman law, and since it was seldom that ecclesiastic suits could not be better settled by use of the canon law, there should be appeals to none other. He accordingly forbade, "under penalty of excommunication * * * any person to employ himself in teaching or learning civil law." As a matter of fact, as suggested by one or two writers, the pontiffs were also influenced not a little by the ostentation and extravagance of the law professors, who by means of practice in the courts were able to indulge in princely habits of living that made numbers of other faculties more or less unhappy. The following from a bull of Honorius III, as quoted by Denifle, would sufficiently indicate this: "We have learned with sorrow that, abandoning the study of philosophy, to say nothing of that of theology, the majority of the clergy hasten to the lectures on secular law; and that in the majority of the states no one is chosen by the bishops to occupy positions of dignity and honor or ecclesiastical prebends unless he is either a professor of civil law or an advocate." Further along, having drawn a gloomy picture of the self-denial, privations, and sufferings of those who were giving themselves to philosophy and religion, he adds: "While our advocates, or rather say our devils, covered with purple, mounted on richly caparisoned horses, in the glitter of gold, the whiteness of silver, the splendor of precious stones, their royal vestments reflecting the splendors of the astonished sun, make ostentatious display and give rise to scandal everywhere." It is almost needless to add that Honorius concluded his bull with a sweeping prohibition of all teaching of the civil law. Happily he had enough of worldly wisdom to privately question the result of his prohibition, and hence to add this saving clause: "If, however, the heads of state permit," etc.

Of course the civil law made its way after a struggle with organized forms, and in due course of time won the favor of the church, so that not infrequently it found a welcome at the foot of the papal throne, and even wrung from the heart of Roger Bacon so moving a plaint as this in the writing of his *Compendium Philosophiæ*: "The jurists have acquired such influence over the minds of prelates and princes that they monopolize all places and favors at their disposal, so much so that students of philosophy and theology remain empty-handed, no longer having the wherewithal to live, to buy books, to devote themselves to research, or to experiment on the secrets of science. * * * The civil lawyers alone are honored and enriched."

A little later still the sentiment of the church had been so far liberalized that Pope Clement V himself at the inauguration of legal studies in the University of Orleans in 1306 delivered himself of this glowing eulogy upon the law and upon the jurists he had in mind: "Let none wonder that the sun glistens on their golden bucklers, for they are the defenders of the country; they disentangle rights from the midst of the most hidden facts; they reestablish the rights of man and come to the aid of the human race, thus meriting by the results of their science as much as if they had saved their country by wounds received in combat."

(2) *The canon law.*—Nevertheless the University of Paris was destined to remain an exception to the teaching of both civil and the canon law in the same institution. The civil law made a modest beginning, but very soon the faculty became exclusively the faculty of canon law, faculty of decrees, or faculty of decretal—all meaning the same department.

The last named was entirely appropriate, for the *Decretum* of Gratian was almost the only, and certainly the chief, authority. Works supplementary

to it, such as the collection in the five volumes by Raymond de Penaforte, brought out in 1234, by the Dominican order, of which he was chief, under the title of Decretals of Gregory IX, or Extra; a sixth book added by Boniface VIII under the name Sexta; and the work known as Clementines, because it embraced the letters of Clement V, published in 1313. Doubtless there were others.

The course of study and teaching methods were substantially those of Bologna, and the same was true of the period, which was six years, or forty-eight months of work spread over the period of seventy-two months, which provision, coupled with the extra thirty-four holidays annually accorded to this faculty over and above the sixty days allowed to all in common, gave the canonists a tolerably easy time. Still, if we make account of the great number of discussions, disputations, and sermons included in the course, for an earnest student, anxious to fit himself thoroughly for the mission to which he had connected himself, there was work enough to be done.

Unfortunately, however, the proportion of this sort of students was not very large—not so large, strange to say, as in other faculties, if the statements of the best authorities known to us are to be credited. Father Denifle, for some unaccountable reason, says little about it, but others who have written on the subject appear to have but one opinion. For example, Bulaeus calls attention to the important fact that the teaching was largely done by bachelors rather than by professors. Compayré also says the professors came to consider the doctorate as a sinecure and so intrusted the work of instruction to bachelors in their stead. Rashdall declares that too many of the students in this faculty were men with whom the attractions of the capital and the ecclesiastical influence of its university were recommendations which far outweighed the scientific superiority of the great provincial schools, and that it was to the faculty of decrees that the great mass of the well-born, well-beneficed, or wealthy idlers of the university belonged, whether their object was to get on in the world and attain high preferment in the church or merely to pass their time pleasantly in a university town. Worse still, he insists that it is more especially with reference to this faculty that we constantly meet with legislation against froward students and even against bribery and corruption in the purchase of degrees or dispensations from the prescribed conditions for obtaining them; that the intentional overestimation of the “bursa” (weekly expenses by which the dues payable to the faculty were regulated) was a common means of corruption; and he concludes with saying: “In short, it is pretty clear that it was almost as easy to buy a Paris degree in canon law as it is, or was till very lately, to buy the title of doctor from certain American universities, though the tariff was much higher and the forms of residence, study, and examination less sweepingly dispensed with. The presents and fees paid by candidates made the position of regent in this faculty a lucrative privilege, which its possessors naturally sought to convert into a monopoly.”

Thurot is yet more severe, if possible, saying: “The faculty of decretal was the most corrupt and venal of all the faculties; it had neither masters nor students; it had only sellers and buyers.”

This picture would be somber enough if but half true. But it should be viewed from the standpoint of the shadowy period to which it pertained, not from that of the present day, and without entire forgetfulness of the darker side of the present, since even we of the twentieth century have but little to congratulate ourselves upon. There has always been a broad enough gulf between religion and religious pretension, and it is to be feared that there always will be. With all its faults and shortcomings, this same faculty of the canon law may nevertheless be credited with a helpful part in gaining for the faculty of

theology and for the university at large that remarkable influence which made it in time not only a leading intellectual center, as well as a force in affairs both social and political, but also a guiding and for the most part healthful influence, if not indeed at times a sort of supreme council and court of last resort for the Universal Church.

IV.—THE MEDICAL FACULTY.

While there were many famous medical practitioners and medical authors in Egypt, Greece, and Arabia in ancient times, we hear of no medical schools until that of Salerno, in Italy. In the eleventh century it became a public school and took a new start under the inspiration and guidance of the renowned Constantinus Africanus, very much as the school at Bologna afterwards did under the impulse and direction of Imerius. He produced the earliest Latin revision of Arabian authors, having first traveled widely in the East, studied at Babylon, visited Egypt, and practiced his profession at Carthage.

After a century or so, there followed other schools of medicine in the West, the first and most important being those of Cordova and Montpellier. Both of these were Saracenic in their origin and gave due prominence to Avicenna and Averroes, while they also honored Hippocrates and Galen.

Montpellier became at length the leading medical school of the world, so that "popes and kings summoned its masters to come and heal them." The first of its statutes were drawn up by Cardinal Conrad, the Pope's legate, in 1220, and, according to Fournier, others followed at intervals of twenty and one hundred years. But in these first statutes the Cardinal made eulogistic reference to the past achievements and services of the institution. The location was deemed fortunate, in that from an early date it had been a rendezvous for both Saracen and Christian merchants, who were naturally followed by learned men, including many Jewish and Spanish Saracens seeking the security and quiet afforded by the liberal laws and friendly manners of its people. Compayré says: "It was Montpellier that Charles VI, in his letters patent of 1396, called the source (*fons originalis*) of medical science. It was a professor of Montpellier, Guy de Chauliac, who published in the fourteenth century (1363) his *Grande Chirurgie*, of which Victor Leclerc has said, "It marked a notable progress in studies based on the observation of nature."

I have said these things of Salerno, and more especially of Montpellier, by way of explaining, in good part, the secondary rank only, in the great medical field, to which the faculty of medicine in the University of Paris actually attained. Having little hope of transcending, or even equaling, the already famous Montpellier, the university professors at Paris were less ambitious, and hence less thorough and less original, and the university as a body sharing this conviction, would the more easily satisfy themselves with a medical department sufficiently important to give a recognized as well as actual completion to an institution the purpose of whose founders had been that very early in its record no faculty or department should be wanting. Besides which there was the old reason, outweighing all others, that theology was to be supreme at Paris.

After no little effort to reach and utilize all available sources of information upon conditions of admission, terms of study in order to obtain degrees, courses of study, authorities relied on, the work of professors, examinations, degrees, and so on, so little has been found that it will be necessary to assume the general accordance between the Paris University faculty and the contemporary schools of medicine, and hence in some matters to report their requirements and usages instead, especially those of the other and greater French school at Montpellier.

It would appear, then, if we are to accept the accounts of Fournier, Crévier, Compayré, and other French authorities—

(1) That, in the statutory conditions of admission, there was such recognition of the value of preparatory studies in the arts as made it necessary to spend at least a year's time more in the medical studies if unlicensed in the arts than otherwise, and that the full period necessary to the degree was nine years, of which term three years (each having eight months of study and attendance upon lectures) were requisite to an examination for the bachelor's degree and the remaining six for the doctorate.

(2) That the lectures were of both grades, ordinary and cursory; and to a large degree they consisted of literal interpretations of old writings, deemed next to sacred, with very little account of recent and present experience, and still less in the way of demonstration in the departments of chemistry, botany, and anatomy, or in practice, whether medical, distinctly speaking, or surgical. Even the Montpellier statutes of 1340 prohibited the use of any book of natural science other than *De Animalibus*.

(3) That the "old writings" referred to were, of course, first of all those of Hippocrates, Galen, Avicenna, Averroes, and Constantine. But, according to Rashdall, the books prescribed at Paris were the *Liber Tegni* of Galen, the Greek; the works of Theophilus, the Byzantine; of the Jewish physician, Isaac; those of Nicholas, the distinguished physician of Salerno; and those of Ægidius, the no less distinguished physician of Paris, especially his *Theoretica* and his *Practica*.

(4) That the spirit of the faculty of medicine finally became scholastic, and even political, to a degree that seriously interfered with the work and practical usefulness of what should have been a thoroughgoing scientific school. Thurot says: "It attached much more importance to disputations than to lessons." And to this Compayré adds:

The ordinary disputations took place every Monday and Thursday from All Saints' Day until Lent—that is, during three or four months. In addition to these there was one disputation more formal than the others, called *quodlibetaire*, because it might relate indifferently to any subject, and each master was obliged to take part, in turn, under penalty of deposition. The supreme end to be attained was, not the acquirement of positive knowledge, but skill in dialectic. The idea that man is made to reason, to be a perpetual dialectician, even in medicine, dominated the human mind, and people seemed to think that syllogisms were good for everything, even disease.

The same author, while generously shielding the medical schools of those times on the ground that science had found little development, that hygiene was a division of medicine hardly dreamed of, and while also half excusing the medical practitioners because the general system of study then "rendered them more apt at distinguishing the premises and consequences of a train of reasoning than in diagnosing disease, more skillful in managing an argument than in handling the scalpel and the bistoury," nevertheless admits to his pages with apparent relish the extravagant raiillery of Petrarch, in his letter to Boccaccio, wherein he says of the doctors of his day:

They never appear in public without being superbly dressed, mounted on magnificent horses, and wearing golden spurs. * * * Next thing you know they will arrogate the honors of a triumph; and, in fact, they deserve it; for there is not one among them who has not killed at least 5,000 men, and that is the number required to entitle one to these honors.

The great hindrances to the progress of medicine as a science in those times were, first, the nonacceptance of the truth that for the most part, to say the least, the universe and man are subject to law, natural and divine, and, secondly, a consequent full committal to the doctrine of divine interference, no less ready and perpetual than arbitrary, and without warrant in reason or justice.

V.—HELPS TOWARD DEVELOPMENT.

Among the many helps toward university development at Paris, it seems proper to mention, first, such as were most direct and may be accounted as privileges—those accorded by the church, state, and municipality.

I.—PART OF THE CHRISTIAN CHURCH.

I name the church first because it fairly entitled itself to that place of honor from every point of view—as originator, promoter, guide, and defender. At Bologna the central idea was jurisprudence, and it was the state, accordingly, that became the first and chief helper of her university in making itself foremost of all in that great department of human interests. But at Paris, for the many reasons already mentioned, the leading part in the university mission was assumed by the church, as being distinctively formed and maintained in the interest of those spiritual concerns which, while the most important of all, are by their very nature and the nature of man ever and everywhere most in danger of neglect.

And well did the church perform her part; availing herself, first of all, of the interest in the higher learning awakened among the people of all Europe by that most zealous and most brilliant, if not, indeed, most learned of her many gifted sons, Peter Abelard; utilizing the ancient and most important of her arts schools then existing, the cathedral school of Paris, under that other able and learned educator, William of Champeaux; and beginning right there, at the best suited and most attractive of European centers, an institution which should become at once her own source of encouragement, guidance, and defense in all matters of religious faith, and the world's supreme authority in the whole field of science, arts, and letters.

Whether one finds himself in accord with the doctrine of the Catholic Church or not, he is compelled by the facts of history to acknowledge that, but for its professed interest, watchful care, and generous sacrifices of many kinds, coupled with the immense influence it wielded among kings and princes, as well as in the world at large, the University of Paris could not then and might never have gained for itself so important a place in the world.

At Paris, as elsewhere during the middle ages, the schools were nearly all under the management of ecclesiastics, and those undertaking the work of teaching came at once under the paternal care of the Holy See, sharing by common consent the many privileges and helps already enjoyed by the religious orders and by the most favored officers and members of the great church at large. And this meant a good deal, for, according to Gibbon, whose records are generally beyond challenge, "the whole body of the Catholic clergy was exempted from all service, private or public, all municipal offices, and all personal taxes and contributions which pressed their fellow-citizens with intolerable weight, and the duties of their holy profession were accepted as a full discharge of their obligations to the Republic." And all these immunities heretofore exclusively enjoyed by ecclesiastics were now not only extended to the university as an organization and to its officers and teachers, but even to all students and other persons over whom the institution exercised a maternal care.

It was Pope Celestine III who, almost before the cathedral school had been thought of very generally as a nucleus for a university, decreed that "for clerics residing in Paris all suits relative to money matters should be tried before ecclesiastical, and not before secular, judges," even as Gregory IX, in confirming the foundation of the University of Toulouse in 1233, decreed that neither masters nor scholars, clerics nor domestics, should be judged by a layman; and as the legate of the Holy See gave to Montpellier statutes, in 1220,

for the forming of a court by the Bishop of Maguelonne, composed of himself and of masters chosen from among those who were deemed "the most discreet and honorable," that should mete out justice to both masters and students and to those who shall bring civil suits against them, while reserving to the bishop himself exclusive cognizance of all matters criminal.

It was the church before whose dignitaries all suits relating to benefices held by a member of the University of Paris were tried. It was a bull of Gregory IX, issued in 1231, which included the following: "If an injustice is committed toward anyone of you [masters at Paris], if a serious injury, like a murder or wound, is inflicted, unless justice is rendered you within fifteen days you are permitted to suspend your lectures until you have obtained complete satisfaction," a decree so far utilized that when, after a serious conflict between students and citizens, on account of a cruel act of the Queen Regent Blanche, who had caused two students to be put to death, and refused reparation, the university first suspended operations altogether, and then dissolved itself by the dispersion of the professors to other parts of the world, until the Pope appealed for their return, and the King made humble apologies and the best reparation in his power; and it was Alexander IV who, when this right of suspension, known as the right of *cessatio*, brought such trouble that he issued a bull of his own, modifying it, was nevertheless constrained to withdraw or suspend the modification when the university authorities insisted upon a continuance of the right, declaring it to be "the buckler of the university." And the university so maintained it through the centuries that in 1407, when the provost of Paris had caused two students to be unjustly hung, the university not only caused a suspension of lectures and sermons during the whole period of Lent, but by a threat of removing the university bodily to some other country compelled the provost "to go in person and take down the two students from the gibbet, kissing them on the mouth, and conducting their obsequies with great pomp." Still another illustration, among many in history, of the power of the university because of the continuance of this papal decree of *cessatio* is given by Compayré to the effect that in 1453, when, after a collision between students and citizens and a number of the former were put in prison and the life of the rector of the university was threatened, the *cessatio* was declared, and the "Parliament was obliged to ordain that eight archers, or ushers, should make the amende honorable to the university, wearing nothing but their shirts and carrying lighted torches," while "the man who had threatened the rector had his hand cut off."

It should also be mentioned that, besides numerous instances of intervention in favor of the university in general, and of individuals connected with it, including officers, professors, students, and even employees, down to the bell ringer, as well as approved supply merchants, there were yet other broad, sweeping papal decrees on occasion, both temporary and without time limitation, that were esteemed beyond price because of the assurances they gave of justice to those whose devotion to the cause of education made them willing to accept great trusts at a personal sacrifice—such, to offer a single example, as the decree that no act of excommunication could affect the head of a university without a special edict from the papal throne.

II.—FAVOR OF THE CIVIL POWERS.

But there was also a universal sympathy with the Parisian and all universities among the civil powers. Kings vied with ecclesiastical potentates and lesser dignitaries in their efforts to promote their welfare—doubtless in some degree because of the material advantage and prestige that would come to their respective kingdoms, yet oftentimes unmistakably on account of a love of learning

and the intellectual advantage that would result to their people. Compayré gives a strong expression to the general fact in saying: "There was on the part of kings, as well as on that of Popes, a sort of conspiracy in favor of the universities."

It was Philip Augustus who, in 1200, after a quarrel between citizens and students, in which the provost of Paris had headed the armed populace by whom a student was slain, heartily espoused the cause of the students, and made such marked reparation as he could by ordering imprisonment for life for the provost, unless he should prefer the ordeal by water, with the accompanying condition that "if he succumbed he should be hanged;" and who further decreed that university students should be tried by ecclesiastical tribunals only—which then meant the Episcopal Court of Paris. No student was to be arrested by an ordinary judge, except in case of extreme necessity, in which event he was to be immediately passed over to the ecclesiastical authorities; and as for their chief, the capitale scholarium, the civil courts were to lay hands on him for no crime whatsoever. It was the Kings of France who, in successive letters patent to the University of Paris, copied the right of the Bologna University—there known as *non trahi extra*—a right by virtue of which members of the university, whether masters or students, and whether defendants or plaintiffs, could have their cases tried at the seat of the university, thus saving them from interruptions to their work, and from the cost of travel and of study at other points, perhaps distant.

It was King Charles II, who, having levied taxes upon certain articles by way of raising money for the war, was pleased to exempt the students at the University of Orleans solely because they were students, as did also King Louis XII, and after him Francis I, a like thing for like reason.

It was Philip the Fair who decreed that the goods of members of the universities should not be taken or their revenues attached under any pretext, and who, with other European sovereigns, so established the principle of student protection that it was practically agreed to by everybody, and that, according to Compayré, the University of Padua laid it down in one of its statutes in these unqualified terms: "Students must be considered as citizens in what concerns the advantages, but not in that which concerns the burdens of citizens." From the same author we also learn that, besides being free from the burdens of civil affairs, the university was also exempt from military service, and that this exemption extended not merely to war but to the obligation of serving in the city militia as town guards; that it manifestly desired, through a high estimate of the superior importance of study, to free both students and professors from all duties that could distract them, or in any way interfere with their intellectual labor, and that "the letters patent of the Kings of France constantly reproduce the same formula, ordering that all members of the university shall be exempt from patrolling or sentry duties, except in case of imminent peril."

The fitness of such measures, in the public judgment, was strikingly illustrated by the exceptional action of Louis XI, who in 1467 determined to enlist all able-bodied men in Paris between 16 and 60 years of age, and who, when resisted by the rector of the university for reasons ably set forth, so modified his order that the university was simply required to cause the weekly celebration of a mass for the King.

Surely enough has now been said to show the esteem in which the universities of the middle ages were held by the ruling powers, both civil and ecclesiastical—to show that the University of Paris was a little republic in itself, made strong by the most extraordinary concessions of Pope and King.

III.—THE CONNECTED AND COOPERATING COLLEGES.

An important and exceedingly interesting feature of the university after a time was the association with it—incidental at first, but permanent, if not indeed organic, at last—of a considerable number of duly established societies or communities. The first of these were known as "hospicia." But soon other organizations appeared, which came at length to be known as "colleges." These last were suggested to the minds of generous and sympathetic men and women anxious to be helpful in some way to worthy but indigent young men seeking for an honorable place in community, church, or state.

The hospicia were not very different in either constitution or management from the hospicia formed by law students of the University of Bologna. They (of Bologna) were voluntary associations of young students of law, leagued together, in simple quarters for both security and economy, choosing their own chief, and making their own regulations. Those of Paris were associations or clubs of younger persons, more commonly with religious inclinations, and the hope to become a "clerk" or something higher. Having to agree upon the house they would like to occupy, as well as the rent they would be willing to pay, and how (i. e., by what system, rules, and regulations) they would be governed, they would of necessity choose a chief to preside over their deliberations and wisely manage their affairs. Such chief was at first commonly known as "principal." He was not necessarily a university master, but he was bound to be of no less importance than a senior in the arts department, and was, in fact, very often a bachelor of arts; and finally it became the requirement that he should be either an A. B. or an A. M. Almost from the first organization of the university it became universal for students to live in houses of this sort, except with two classes, namely, the wealthy, who lived in their own homes or in elegant apartments elsewhere, and the very poorest, who, being unable to make the payments required of them by the hospicia, got on the best they could in some miserable garret or cheap tenement, in some wretched quarter of the city.

Accepting the statements of Denifle and Rashdall, the college was nothing different from an endowed hospicium. It was less democratic, in that the master who governed as principal was placed at its head by the founder instead of his associates. But in both cases the members of the college had a share in its management.

It seems that the first of such foundations was exceedingly humble, being the consecration of a single room "for poor clerks" in the "Hospital of the Blessed Mary of Paris," situated near the Cathedral of Notre Dame, and finally known as the Hôtel Dieu. Thanks to a pilgrimage to Jerusalem by the large-hearted Josius, of London, and a subsequent visit to this hospital, the room thus consecrated was purchased and fitted up for "eighteen scholar-clerks," the proctors of the house further agreeing to pay them "twelve numinia a month out of the alms collected in the hospital chest." As for the scholars thus favored, "their sole statutory obligation was to take turns in bearing the cross and holy water at the funerals of those who died in the house, and nightly to repeat the seven penitential psalms and other customary prayers."

Foundation after foundation, some of them very liberal indeed, followed each other right along through the years of the thirteenth century and of the succeeding two centuries to the number of over sixty colleges.

The first of the colleges of higher rank than that of a grammar school was named the College of Constantinople, in remembrance of its connection with the Latin conquest of that city of the East in 1204. It was to help in the great

undertaking of supplying the East with a host of ecclesiastics from the center of Christian theology and for the bringing a like or greater number of Greek, Turkish, Arabian, and Persian youths to Paris for conversion to the true faith.

In the College of St. Nicholas du Louvre, endowed as early as 1241 and favored with a royal charter in 1293, the university found the first institution of this class planned especially for students in the university faculty of arts.

The House of Sorbonne, though at first planned, as said before, for 16 students of theology, was soon enlarged by other benefactions so as to accommodate 36. Many contributions were made to its endowment. St. Louis gave a part of the site, near the palace of Julian, and collections were made for it in the churches by indulgence of bishops and Popes, so that after a little it was in a most prosperous state and could allow each "fellow" to have a "poor clerk" as his personal attendant, sharing his chamber and other advantages. Its government and the supply of its "burses" were made the duty of the archdean or chancellor of Paris, the doctors of theology, the deans of other superior faculties, and the rector and proctors of the university, the more immediate management being intrusted to a "provisor." This was a college of theologians—those who, having taken the degree of M. A., were eager to enter upon the long and laborious task of preparing themselves for that of doctor of divinity. It took high ground at once and finally gave its title (the Sorbonne) to the whole faculty of theology, for popular use, by reason of its interest, activity, and influence in the discussions and informal judgments upon matters of faith so commonly rendered in its halls. Duvernet says of it:

The great care which was taken not to admit among the teachers any but men of the highest talents and attainments soon procured for the school a European fame, and in the fourteenth century the entire theological faculty of the university was merged into it. During the middle ages, the period of the Reformation, and even after that time, the Sorbonne was generally considered one of the highest authorities of the Christian church, and its decisions were appealed to not only in theological controversies, but also in the contests between the Popes and the secular powers. It was a staunch champion of the freedom of the Gallican church and strongly opposed to ultramontaniam. It condemned Jansen and the Jansenists in matters of doctrine, but sided with them in their fight with the Jesuits. Its culmination was in the time of Cardinal Richelieu, who, himself a graduate of the school, provided it with a magnificent building and enlarged its library.

The College of Navarre was not very different from the Sorbonne in either purpose or administration. It was founded in 1304 by Joanna, Queen of Navarre, and consort of Philip the Fair, and was munificently endowed and handsomely administered. At first the government and patronage were with the faculty of theology, afterwards with the Bishop of Melun, the Chancellor of Paris, the dean of the theological faculty, and the grand master, and last of all, after many more changes, with the King's confessor, by his own arbitrary appointment.

The more noticeable feature of these last two, which were the most liberally endowed as well as the most distinguished of the colleges at Paris, was the increase of college teaching which they especially represented. They became the pioneers in bringing about important changes in this regard. The theological masters connected with them had lectured in their halls from the very first, and their lectures were so ordered, prepared, and delivered, in harmony with the courses established by the faculty of theology, that they were accounted as of the university in determining the claims of students therein. Other colleges followed suit as they were able, adopting the new educational methods and opening their living accommodations as well as halls of instruction to outsiders until, in 1445, the university authorities are said to have been found declaring to the King, "Almost the whole university resides in the colleges."

Independent of the advantages accruing to the university from the college system which have been already noted, there was another of much importance—the better discipline among the students than would otherwise have been possible. As already remarked, the university was at first a voluntary association of masters acting in their individual capacity; not a single, compact institution, with its corps of universally accepted officers. It determined the courses of study to be completed in order to reach certain honors and prerogatives, but had nothing to do with the discipline of its students. It was the university of masters and scholars, with the masters in command, and it might properly enough have been expected of them that they would assert and maintain their authority over the students in matters of conduct as well as of study. But they did not. Discipline in the outer world was left to the police and to the ecclesiastical tribunals established by university request; that of the hospicium or hall or pedagogium and college to their several principals, pedagogues, and masters. It was not before 1287 that the university provided for the registering of the students' names in the matricula and an inventory of their property. It was wholly at sea, therefore, when a student was under arrest and proof was demanded of his connection with the institution. And it was not until the fifteenth century that the faculty of arts, as being that one of the faculties that embraced the greater number of students, including nearly all of those under age and likely to require supervision and discipline, rallied its forces, established disciplinary regulations, and sought to put an end to the fearful outbreaks, fierce conflicts between bands of armed students, and between student mobs and citizens, which were of such frequent occurrence as to make the city almost willing, at times, to allow the university authorities to execute their threats to locate the institution somewhere else.

But even the colleges found it difficult sometimes to duly supplement the university in the field of conduct. The spirit of independence, quite regardless of the demands of moral order or of common decency, was now and then so rampant that there was a general looking about for some sort of a remedy. It was in this spirit of barbarism that scholars in the same boarding house into which some of the hospices and weaker colleges had been half transformed got into the habit of migrating from one to another when they could not quite have their own way, and, in case of hindrance to their plans, visiting the most brutal judgments upon the establishments so interfering.

It was well, therefore, that the university (or its constituent faculties and nations) maintained and so enlarged its influence and control over the colleges that when aroused it was able to provide and enforce regulations even for their internal management; that it was able, when necessary, to remove their officers, even their founders, when the circumstances demanded. Doubtless it was not an authority always enjoyed or even acquiesced in by the colleges, but it was none the less for the general good that it existed and the right of visitation was maintained. Moreover, the migration referred to was prohibited, and the character and availability of the colleges were so far improved that by 1463 residence within the "pedagogy" or college, with certain exceptions, was made obligatory, and the mastership therein was treated as a university office, and they were not only allowed but encouraged to attract lecturers of established reputation and thus conduct the work of education to an important extent—to such an extent, indeed, that in some departments almost the entire instruction requisite to a degree was conducted in them. This was especially the case in the department of theology, the lecturing in which came to be practically confined to the great colleges of the Sorbonne and Navarre (both secular), with a little help from the "regulars."

The advantage to the university was that the college system largely relieved

the university of the responsibility of renting buildings and halls, of raising money for the masters and doctors who conducted the instruction, and devolved it upon many lesser institutions, which, while practically subdivisions of it and enjoying the benefits of its guidance and influence with state and church, at the same time had the benefit of that spirit of honorable rivalry which makes itself so immensely helpful in every great field of activity.

VI.—SOME OF THE HINDRANCES.

There is another side of this picture, however. It was not all sunshine with the university. There were serious hindrances, as well as many helps toward its development.

I.—THE OPPOSING CHANCELLOR OF NOTRE DAME.

The first of them was the antagonism, in one form and another, of the powerful chancellor of the cathedral, whose personal ambition was unbounded, and who, foreseeing the probability of a loss of power in university matters unless great vigilance and skillful management should be exercised on his part, was persistent in his opposition to all forward tendencies. The association of masters of arts, ready for any service as teachers in the arts department of the coming university, which had been formed almost spontaneously and without very definite aims around the cloister school of the cathedral, finally came to a realizing sense of the looseness of its organization, and began to think seriously of a formal and legal incorporation of the several schools or faculties growing up and to be developed as one great institution, with statutes of its own, and with the requisite facilities and powers.

It seems that hitherto the chancellor could not only grant or refuse licenses to teach at his own pleasure, but could take away a license already enjoyed, or deprive a student of his privileges as such, and by his own arbitrary command also rob either master or student of the ecclesiastical privileges appertaining to his connection with the schools. He was in fact clothed with, or at least exercised, the most absolute tyranny, and did not omit to indulge himself in the exercise of his authority. He enforced his decisions by excommunication, and had control of a prison for the confinement of the refractory. The only offset the society of masters had lay in the fact that, while all-powerful in the granting of the licenses, he could not compel the association to admit as a member anyone so licensed. On the other hand, they could require every new master to make oath to obey the regulations of the association, and could impose various penalties and disabilities upon anyone who, through falsities or other misconduct, had rendered himself obnoxious. Moreover, no licentiate of the chancellor was accounted fully empowered until he had been received into the association of masters by a public inception.

It is manifest that two forces thus so empowered, respectively, and in the nature of the case, antagonistic, would have almost unceasing conflicts. And so it was with the chancellor and the masters.

Many interesting accounts of clashes, prosecutions, and suits are recorded. It was the chancellor versus the university, or vice versa, all the while, until the powers at Rome became weary and intervened by decreeing: (1) That the oaths of obedience to the chancellor hitherto taken by masters should be relaxed; (2) that there should be no exaction of such oaths in the future; (3) that the chancellor's licenses should hereafter be gratuitous; (4) that it should be the duty of the chancellor to grant licenses to all candidates recommended by

a majority of the masters in the several superior faculties, or by six selected masters in the faculty of arts, three to be named by the chancellor and three by the faculty; (5) that there should not be imprisonment of scholars during trial in case of but slight offenses, and that in any event a scholar imprisoned should be discharged upon the furnishing of sufficient bail, and, finally, (6) that the chancellor should under no circumstances whatsoever impose a money penalty on a convicted student, though there might be an award of damages to the party injured.

Two years later (in 1215) these provisions were embodied in permanent statutes imposed by Cardinal Courçon, together with the right of the university, within certain limits, to make statutes for its own government and to require oaths of obedience thereto.

Nevertheless the conflict went on, becoming more and more bitter on the part of the chancellor, who, with the cooperation of the bishop, even went so far as to revive an old and defunct proclamation against conspiracies, and to excommunicate the university as a whole, on the ground of disobedience thereto. The very existence of the university was a conspiracy from the chancellor's and bishop's point of view and they were bent on destroying it. Happily the Holy See took a very different view, and in 1219 and 1222 bulls were issued by Popes Honorius III and Gregory IX which turned the scale and gave to the university a larger freedom.

II.—THE OPPOSING MENDICANT ORDERS.

A more subtle and still more troublesome hindrance was found in the mendicant orders, Dominican and Franciscan, both of them powerful and persistent.

Ere the coming of the twelfth century the higher educational work was quite exclusively done in the convents, some of which had forgotten the old-time simplicity and become both wealthy and vainly ambitious. The schools known as "external," which followed the efforts of Charlemagne, had so far occupied this field and interfered with the plans of the monastics that the cloisters had practically ceased to furnish educational facilities for the seculars, who by the twelfth century had become the active workers. The monasteries were gradually ceasing to be intellectual forces, and there must come a new order of things unless they were to lose their hold upon the more progressive elements of society, and above all upon the educational agencies already in the lead at the great centers of intellectual effort—even the universities themselves.

The disciples of St. Dominic were first to gain the conception and first to move with energy. Already established at Bologna, Paris, and Oxford, in each of which places they had schools of collegiate rank, with this ambitious end in view they soon aroused the less intellectually ambitious Franciscans, who were not willing to be left behind, and they, too, established a convent at Paris. The two orders were different in spirit and purpose in that the Dominicans were zealous for conservative orthodoxy, while the Franciscans seemed constitutionally inclined to encourage new theories and new social movements, and were, of course an easy prey for new heresies. But both were in harmony on the vital necessity for overcoming the rationalistic tendencies of the time. Aristotelianism, in spite of the early narrowness of the Church, had not only come to be thought safe, but its dialectic element was now reinforced, philosophically speaking, from the East, through Saracenic channels, and had brought with it new and disturbing elements in the teachings of Avicenna and Averroes. As a consequence, skepticism had established itself at Paris with very serious results for a considerable time, and there were measures against the reading of Aristotle's newer works. After which, however, came the adoption out and out of

his writings as text-books in the university faculty of arts, followed by direct translations of Aristotle from the Greek, by acts for the suppression of heresy by fine, etc.

Meanwhile the Dominicans, made strong by the teachings and writings of those two greatest men of the age, Albertus Magnus and his pupil Thomas Aquinas, steadily gained ground. The first won the world to Aristotle by making his philosophy Christian, while Aquinas devoted himself to a reconciliation of the new truths and highest thought with the profoundest of religious convictions based on the truths of the Gospel.

At first the studies of the friars were made in the secular theological schools then available, but later they were pleased to present themselves at the university for admission to the faculty of theology. They were cordially received and continued to avail themselves of its facilities until the great dispersion of the university masters and doctors because of the suspension of university work in 1229, already mentioned. But during the suspension the friars were pleased to form a school of their own; nay two schools, the newly converted theologian, John of St. Giles, of England, having been constrained by his admirers to open a second.

At about the same time the Franciscans opened a school under the leadership of another Englishman, Alexander Hales, as also did still other religious orders, so that the university, when it had settled itself down again to regular work, found a whole cluster of theological schools doing the work which the faculty of theology had hitherto supposed itself fully and alone competent to do. The mendicant orders had taken the field and a conflict was inevitable. A bull from the Pope requiring the chancellor at Paris to confer the *licentia docendi* upon as many members of the religious orders as upon examination he should find qualified opened the rupture quite unexpectedly in 1250. The defense was promptly taken up, first by the great university association in the form of an insistence upon its right to refuse to approve the inception of doctors whom the chancellor had licensed without its consent; and, secondly, by the faculty of theology in a formal statute against the Dominicans, Franciscans, and all other of the mendicant orders to the extent of ordering serious limitations upon the privileges of their members. Riots and other troubles resulted, and these were followed by a university decree of *cessatio* (cessation of lectures), by the refusal of obedience thereto by three friars, two of them Dominican and one Franciscan, by an ineffectual appeal to Rome, by a university requirement that all masters should swear to insist on justice, and by final expulsion of the friars.

The persistency of the university in this case had been due to the discovery that the friars were bent on enjoying the benefits of the association of masters, whether obeying its requirements or not, as they might prefer. The masters were firm in their determination that the regulations of the society should be sacredly observed. It was absolutely necessary to the maintenance of the university itself. The offending friars were expelled. Then followed an appeal to the Holy See, an annulment of the order of expulsion, a positive requirement for the reinstatement of the offenders, and the defiance of the Pope in the form of official notice to the thousands likely to attend the instruction and sermons of the friars that their schools would not be recognized by the university. After Innocent IV, who favored the seculars and condemned the usurpations of the friars, his successor, Alexander IV, took the other side very emphatically, and even offensively. Bull succeeded bull, and yet the masters resisted, finally adopting the expedient of dissolving their society as a means of cutting off the mendicants from association with them, as hitherto.

Under these circumstances it was inevitable that the seculars should decline in power and influence. But in 1261 Alexander IV died and the university

found a new friend in his successor, Urban IV, who had been a Parisian canonist and who took a different view of matters. As a result, bulls of privilege took the place of bans of condemnation, and among them certain restrictions upon the privileges which had been acquired by the mendicants, to the effect that, although members of the faculty of theology, the faculty of canon law, or the university as such, the mendicants and the students with them could, nevertheless, be refused admission to the faculty of arts or the *societas magistrorum et scholarium* at its pleasure; that no religious college would be allowed to have more than two doctors acting as regents and sitting at the same time in the general congregation of the university, and that secular students should thereafter incept under secular doctors only. Naturally, under existing circumstances, these rights of refusal accorded to the faculty of arts and the university congregation were duly exercised. Seculars were not debarred the privilege of attending lectures given by friar doctors, yet their inability to incept under them, together with the oath to "stand with the secular masters to whatever state he should come," regularly administered to every master of arts at his inception, would, in most cases, prevent such attendance.

Thus, while failing of entire success in recovering its ground, the university had nevertheless won a substantial victory after a long and bitter contest, so that in 1318 it was able once more to impose upon the friars the oath of obedience to its statutes. Furthermore, by reason of the conflict, the university and its faculties became better organized. The corporate body could act for one of its faculties as a whole, and the acts of the faculties were to be treated as acts of the university. A system of finance had been developed, and the university had acquired a consciousness of its ability to hold its own high ground in defiance, if need be, of decisions of the Holy See.

VII.—CONCLUDING WORDS.

I have thus presented, with such fullness as the prescribed limit would allow, a systematic and orderly detail of the several steps by which the University of Paris advanced from its small beginning to final greatness. Totally wanting in the grand cluster of palatial halls, laboratories, museums, observatories, and other establishments suggested by the munificent endowments and ambitious plans of the Stanfords, Rockefellers, and Carnegies of modern times, the early University of Paris is nevertheless more deeply interesting than all of these because of the simple and rude conditions—material, social, political, and religious—of its origin, the intellectual awakening among the people of many lands which fostered it, and the unparalleled enlistment of kingly and papal powers which finally established it.

As already remarked, the notable achievements of the University of Paris were not alone in the field of learning, where indeed they were unsurpassed, but also and especially, as already suggested, in affairs national, international, and ecclesiastical. Its place in the world was exceedingly fortunate on many accounts. Unlike Bologna and other Italian universities in relation to the cities where they were located, it made itself a part of Paris and Paris a part of it, with resulting greater numbers of both masters and students, with increasing interest on the part of the religious, municipal, and national authorities through a most natural pride and sympathy, and with such relationships as eventually gained for it an unprecedented and otherwise impossible influence and power.

After its safe passage through the perils at first believed to attach to the pagan philosophies of Greece, Arabia, and Persia, and the reenforcement of its

faculty of theology by the very ablest philosophers and theologians of the age, the university easily came to the honors and responsibilities of what was in fact a supreme council of the church—rectifier of minor errors, whether of prelates or others, and the invincible defender of the faith where assailed from without. It created a scholastic theology, and it was thus, as Rashdall has well said, that it triumphed over the skeptical as well as over the mystical reactionaries, and became “the first school of the church and theological arbiter of Europe;” for, “however much the theological dictatorship assumed by the university may have blasted the fair prospects of the twelfth century ‘illumination,’ it was by means of this dictatorship that Paris conferred on France, and indeed on all northern Europe, one of the most memorable services which she ever rendered to the cause of enlightenment, of civilization, and of humanity.”

The reference here is, of course, to the influence exerted by the University of Paris in saving France and other portions of northern and northwestern Europe to so large an extent from the fearful ravages of the great inquisition.

Another signal service was that of resisting, and in some measure thwarting, as we have seen, the adverse schemes of the mendicant orders. It was, indeed, the most powerful champion of the secular clergy in their many conflicts, while in the remarkable schism which for a time divided the papal power the university also managed with great wisdom and was at last the main instrument in bringing about a return to unity. It had come to first honors, so that it even sent ambassadors to foreign courts on missions most important, and thus gained a still larger influence in the affairs of the world at large.

I have dealt first with the ecclesiastical side of this interesting subject of the university's influence because it was, first of all, by intent of its founders and in actual service, a theological institution par excellence. But the situation of the university at Europe's most brilliant and most influential center was no less fortunate from a political than from a theological point of view. Because of this simple fact it gained a supreme advantage, as already noted, and well it utilized it. First of all, it won the favor of the King, so that in a large sense he made it his special protégé, protecting its students from abroad when at war with their native lands and thus making them practically citizens of the world; tenderly entitling it “eldest daughter of the King,” and opening the way for it to become a real force and influence in national and international affairs.

In many cases the university became the chief pacificator, outranking in recognized dignity and importance all other mediators, civil or ecclesiastical. It had become a “European power.”

Historians dealing with the middle ages have with one accord made Germany first in imperial power and martial glory; Italy first in jurisprudence, in art, and in ecclesiastical authority, as seat of the papal power; but to France no less fitly belongs the honor of having produced that most brilliant and influential of the world's universities, through whose agency her queenly capital was made first in the realm of letters, first in science, first in medieval philosophy, and first in scholastic theology, as well as foremost in the vast and diversified realm of those practical, æsthetic, and social arts which are essential to the world's progress in civilization.

CHAPTER VI.

THE WORK AND INFLUENCE OF HAMPTON.

PROCEEDINGS OF A MEETING HELD IN NEW YORK CITY, FEBRUARY 12, 1904, UNDER THE DIRECTION OF THE ARMSTRONG ASSOCIATION, WITH THE ADDRESSES OF MR. ANDREW CARNEGIE (CHAIRMAN), PRESIDENT CHARLES W. ELIOT, DR. H. B. FRISSELL, AND DR. BOOKER T. WASHINGTON.

The meeting was opened by Mr. William Jay Schieffelin, president of the Armstrong Association, who read the following letter from ex-President Cleveland:

PRINCETON, *February 8, 1904.*

MY DEAR SIR: I am sorry I must forego the gratification of attending the meeting to be held on the 12th instant for the promotion of the purposes of Southern educational work.

I am so completely convinced of the importance of this cause, as it is related to the solution of a problem which no patriotic citizen should neglect, that I look upon every attempt to stimulate popular interest and activity in its behalf as a duty of citizenship.

All our people and every section of our country are deeply concerned in the better equipment of our negro population for self-support and usefulness. There should be a general agreement as to the necessity of their improvement in this direction; and all good men should contribute, in the manner best suited to their several circumstances, to the accomplishment of this beneficent result.

Different sections of our country are affected in differing degrees and with greater or less directness; but it seems to me all must concede that no agencies can possibly do better service in the cause of negro amelioration than the institutions in which they are taught how to be self-supporting and self-respecting.

Such institutions as these, which have demonstrated their efficiency, and which prove their merit by an exhibit of successful effort, should be constantly and generously encouraged and assisted. The extent to which this is done may well be accepted as a test of our sincerity in the cause of negro improvement.

Yours, very truly,

GROVER CLEVELAND.

Mr. Schieffelin then presented, as the chairman of the meeting, Mr. Andrew Carnegie, who spoke as follows:

ADDRESS OF MR. CARNEGIE.

Ladies and gentlemen, we meet upon the birthday of the great emancipator, Abraham Lincoln, he who knocked the shackles from 4,000,000 slaves and made them physically free under the law. But in the higher sense he only is a free-man whom education makes free. Lincoln did his part, but he only began the task. It remains for us, the followers of that leader of men, to continue and complete it. This brings us here to-night.

There is one class of men which experience is said to teach—the fools—but I suspect these are beyond teaching. Let us rather say that experience teaches the ignorant. I suggest this change because by experience I have been taught the Southern problem, and hesitate to class myself with the former. Every man and woman in the North who has not lived in the South, or visited it often

for extended periods, must be ignorant of the South and the serious problems which confront our fellow-citizens there, white and black. We have nothing like it in the North; neither has Britain nor any English-speaking community under free institutions similar conditions with which to deal, because it is not only a question of less or more education, but of race. Before I had a vote I was an ardent Free Soiler, and a contributor in my 'teens to the New York Tribune, then our great antislavery organ. After the war my brother and his family made their winter home in the South, and during my numerous visits there I was brought face to face with the Southern problem, and became deeply impressed with its gravity, as any Northern man is who is brought face to face with it. It was an entirely new problem, which I had never thought of and never could have correctly imagined. Preconceived ideas of liberty and equality, ending in the sublime privilege of the suffrage, were rudely shaken, and I was forced to see that it was not enough to say that "a slave can not live in the Republic; he breathes our air; his shackles fall." That necessary act performed, the task does not end; it only begins. We have destroyed one bad system, but constructive work is needed. The shackles may be off, but the slave of yesterday can not rise to the height of full citizenship next day. The prisoner from the dungeon, long confined in darkness, is blinded for a time by the light when released. Resolutions and party platforms, eloquent harangues upon liberty, equality, and fraternity, promote no healthy growth, produce no good fruit. Even legislation can not reach the seat of the malady. The men who stand face to face with the Southern problem are soon convinced that the needed help, the uplifting element, the indispensable instructor, is to be sought in an entirely different direction. The cure is not political, but social. Now, ladies and gentlemen, here is a remarkable fact—for fact it is as far as my knowledge extends—which I ask you to note. There never was, so far as I know, an intelligent, worthy, kindly Northern man who settled in the South and became conversant with its conditions whose experience has not been mine as I have recounted it to you. Without exception, they change their views and deeply sympathize with their sorely tried white brethren of the South and see that only through cordial cooperation with them is the needed work of raising the negro to be successfully accomplished. We should ponder upon this, especially those of us in the North who have not known life in the South. I am persuaded that the educational conference presided over by Mr. Ogden, represented here by him and others; Tuskegee, represented by that remarkable leader of his people, Mr. Washington; Hampton, represented by the president, and others are on the right path, and theirs the means through which the colored man is to be made capable of finally exercising the powers and performing the duties of a citizen of a free State with safety to the State. Many of you have read the wise paper of our distinguished fellow-citizen of New York, Hon. Carl Schurz, present with us to-night, an essay full of wise counsel. He points out that our aim should be first to lift the colored man and make him worthy of citizenship, never denying him, however, that ideal which he should strive to attain finally—complete political equality.

Perhaps I can give you a just conception of the difference in the situation with us in the North and our white friends in the South. We safely extend the suffrage in this home of free schools and universal education, and trust to education to make sober-minded, intelligent citizens as the sure effect of knowledge. The number of new citizens given the suffrage who are not sufficiently informed is relatively small. Even if they vote unwisely they do not drown the voice of the intelligent. These are still in the majority and their views prevail. Good and safe government is not endangered.

In the South the ignorant are the immense majority. To give suffrage with-

out restriction to the blacks would mean that the intelligent whites were powerless—overwhelmed. Government would be in the hands of men steeped in ignorance of political responsibilities to a degree impossible for northern people to imagine. Only residence among them can give a true impression. No fault this of the colored people who were reared and held in slavery, or who at best are only emerging from that depth. The cheering fact is that they have shown and are showing more and more the capacity to rise in the scale. There can not be any doubt about this; their rapid and increasing acquisition of property proves it beyond a cavil.

Now, the wise policy seems obvious. We should agree that the keeping down of millions of people, even if successful, would be destructive to civilized society and a menace to the State. To treat them as if they had already risen would be equally so; therefore, an educational test for the suffrage should be adopted and strictly applied, applicable to white and black alike, for ignorance in the whites is deplorable. There is only one way to make satisfactory members of society, whether black or white, and that is through education in its widest sense.

So much for the dangerous and difficult problem of the South. To our white brothers and fellow-citizens of the South we owe at least an equal duty, and especially to the ignorant. He is no true friend of the South or wise American who forgets this, and I hope we shall prove in the future that while we sympathize with the colored race we do not forget our white brothers. After all is said and done, the improvement of the South, white and black, must be accomplished by the best educated white element in the South, which is in sympathy with our views and seeks the steady though perhaps slow elevation of both races, not the continued degradation of either. I stand before you to-night, side by side and hand in hand with our Southern brothers of our own race, feeling that it is through them we must labor if we are to solve the threatening problem which menaces the South. Fortunately the Educational Conference, Hampton, and Tuskegee all recognize this and find a responsive white element in the South, with which they are in cordial alliance.

It is amazing to see now and then schemes for the expatriation of the colored race, as if such a transfer were possible, which is not, and further, as if such a transfer were desirable, which it is not. We have a country with less than thirty people per square mile. England and Wales, Belgium and Holland, have over five hundred. We can not produce cotton enough for the wants of the world. We should be in the position in which South Africa is to-day but for the faithful, placable, peaceful, industrious, lovable colored man; for industrious and peaceful he is compared with any other body of colored men on the earth—not up to the standard of the colder North in continuous effort, but far in advance of any corresponding class anywhere. South Africa has just had to admit contracted Chinese labor, although there are between five and six millions of colored people there who will not work. We should be in the same condition but for our colored people, who constitute one of the most valuable assets of the Republic, viewed from an economic standpoint. It is certain we must grow more cotton to meet the demands of the world or endanger our practical monopoly of that indispensable article. Either the efforts of Europe will be successful to grow in other parts, even at greater cost for a time, or the world will learn to substitute something else for it. We can not afford to lose the negro. We have urgent need of all and of more. Let us therefore turn our efforts to making the best of him. Signs are highly encouraging. Individuals of the race who have risen and are to-day good citizens and worthy of the suffrage are easily found, and it is by the exceptional man every race is lifted.

The race is improving and is capable of continued improvement, and the poor whites of our own race in the South, it goes without saying, are capable, with proper education, of what we ourselves have accomplished. We proclaim as our sole purpose the steady elevation of the ignorant of both white and black races in the South. That is the duty in behalf of which we meet to-night, with our hands and hearts outstretched to our own race in the South, beseeching its wisest leaders to advise us how we can best cooperate with them under their guidance for the genuine advancement of that portion of our common country we love so well.

Mr. CARNEGIE. Ladies and gentlemen, I have now to introduce to you one whose voice is heard upon every vital question affecting our country; and there is one merit President Eliot possesses in the highest degree—there is never any doubt where he stands. Our universities are sometimes charged with neglect of attention to civic questions, but there are none in any other country whose presidents take such leading parts in public affairs and who are such leaders of the people. Among the foremost of these ranks he whom I beg to present, President Eliot, of Harvard, our oldest university.

ADDRESS OF PRESIDENT ELIOT.

There is no larger or graver problem before civilized man at this moment than the prompt formation of a sound public opinion about the right treatment of backward races, and Hampton possesses the keywords of that great problem—education and productive labor. The support of Hampton Institute depends directly on public opinion concerning it among intelligent and public-spirited people North and South. Let these people remain convinced that Hampton not only has been but is and will be an effective instrument for uplifting the two backward races it serves, and let this conviction be as firmly and broadly planted in the Southern mind as in the Northern and the vigorous life of the institute is assured.

I therefore ask your attention to some of the resemblances and some of the differences between opinion at the North and opinion at the South concerning the negro.

In the first place, northern opinion and southern opinion are identical with regard to keeping the two races pure—that is, without admixture of one with the other. The northern whites hold this opinion quite as firmly as the southern whites; and, inasmuch as the negroes hold the same view, this supposed danger of mutual racial impairment ought not to have much influence on practical measures. Admixture of the two races, so far as it proceeds, will be, as it has been, chiefly the result of sexual vice on the part of white men; it will not be a widespread evil; and it will not be advocated as a policy or method by anybody worthy of consideration. It should be borne in on the mind of the southern whites that their northern brethren are entirely at one with them in this matter, in spite of certain obvious differences of behavior toward the negro at the North and at the South.

Let us next consider some of these differences of practical behavior. At the North it is common for negro children to go to the public schools with white children, while at the South negro children are not admitted to white schools. This practice at the North may be justly described as socially insignificant, because the number of negro children is in most places very small in proportion to the number of white children. In northern towns where negro children are proportionally numerous there is just the same tendency and desire to separate them from the whites that there is in the South. This separation may be effected by public regulations, but if not it will be effected by white

parents procuring the transfer of their children to schools where negroes are few. The differences of practice in this matter at the North and at the South are the result of the different proportion of negroes to the white population in the two sections. Thus in the high schools and colleges of the North the proportion of negroes is always extremely small, so small that it may be neglected as a social influence. Put the prosperous northern whites into the Southern States, in immediate contact with millions of negroes and they would promptly establish separate schools for the colored population, whatever the necessary cost. Transfer the southern whites to the North, where the negroes form but an insignificant fraction of the population, and in a generation or two they would not care whether there were a few negro children in the public schools or not, and would therefore avoid the expense of providing separate schools for the few colored children.

With regard to coming into personal contact with negroes, the adverse feeling of the northern whites is stronger than that of the southern whites, who are accustomed to such contacts; but, on account of the fewness of the negroes at the North, no separate provision is made for them in public conveyances and other places of public resort. It would be inconvenient and wasteful to provide separate conveyances; and, moreover, race is not the real determining consideration in regard to agreeableness of contact in a public conveyance or other public resort. Any clean and tidy person, of whatever race, is more welcome than any dirty person, be he white, black, or yellow. Here again the proportion of the negro to the white population is a dominant consideration. On the whole, there is no essential difference between the feelings of the northern whites and the southern whites on this subject; but the uneducated northern whites are less tolerant of the negro than the southern whites. More trades and occupations are actually open to negroes in the Southern States than in the Northern.

I come next to a real difference between northern opinion and southern opinion—a difference the roots of which are rather hard to trace. At the North nobody connects political equality—that is, the possession of the ballot and eligibility to public office—with social equality; that is, free social intercourse on equal terms in the people's homes. At the South the white population seems to think unanimously that there is a close connection between the two questions following: Shall a negro vote or be a letter carrier? and Shall he sit with a white man at dinner or marry a white man's sister? At the North these two questions seem to have nothing whatever to do with each other. For generations the entire male population of a suitable age has possessed the ballot; but the possession of the ballot has never had anything to do with the social status of the individual voter. In the northern cities, which generally contain a great variety of white nationalities, the social divisions are numerous and deep; and the mere practice of political equality gives no means whatever of passing from one social set to another supposed to be higher. The social sets are determined by like education, parity of income, and similarity of occupation, and not at all by the equality of every citizen before the law. Many an old New England village and many a huge tenement house in a great city at the North illustrate the sharpness and fixity of social distinctions much more strongly than the newest fashionable quarter.

The male villagers call each other John and Bill when they meet on the road or at town meeting, but their families hold themselves apart. In the tenement house families will live for years on the same staircase and yet never exchange so much as a nod. In democratic society it is only "birds of a feather that flock together," and true social mobility in a democracy is not preserved by the ballot or by any theory of the equality of all men before the law, but by public educa-

tion and by the precious freedom which enables the men and women who possess remarkable natural gifts of any sort to develop and utilize those gifts. This democratic mobility is an application of the general principle that human beings of the same sort, possessing the same desires and governed by the same motives, will seek each other out and associate in the pursuit of common objects, whether at work or at play. At the North, then, people do not in the least connect political equality with social equality of intercourse. In this respect the northern people closely resemble the English and the nations of continental Europe that have introduced the ballot into their political structures. No European has ever associated the possession of the ballot with social equality. An Englishman would find such an idea utterly unintelligible. During the nineteenth century there have been successive extensions of the suffrage in England, but these extensions have not affected in the least the social classification of the English people. To the northern mind there is something positively comical in the notion that a letter carrier or a fourth-class postmaster or an alderman changes his social status or his social prospects when he attains to his office. At the North this man remains in the social position to which his education, business training, and social faculties entitle him. His fellow-citizens may form a new opinion about him from the way he does his work and from his bearing and manners, but if his social status is altered in any way it will be because his personal qualities give him a lift or a drop, and not because he holds an office by election or appointment. At the South, on the other hand, the possession of the ballot before the civil war distinguished the poor white from the black slave, and to hold public office was a highly valued mark of distinction among whites. Hence the southern whites are convinced that possession of the ballot and eligibility to public office, however humble, tend toward social equality between two races which ought not to be mixed, while nothing in the long experience of freedom among the northern whites has ever suggested to them that there is any connection between social intercourse and political equality. The southern white sees a race danger in eating at the same table with the negro; he sees in being either the host or the guest of a negro an act of race infidelity. The northern white sees nothing of the kind. The race danger does not enter into his thoughts at all; he does not believe there is any such danger. To be the host or guest of a negro, a Mexican, or a Japanese would be for him simply a matter of present pleasure, convenience, or courtesy. It would never occur to him that such an act could possibly harm his own race. His pride of race does not permit him to entertain such an idea. This is a significant difference between northern whites and southern whites. Their sentiments on this subject are really unlike—so unlike that they do not understand each other. Yet their fundamental belief that the two races ought to live socially apart is precisely the same. The southern sentiment on this subject ought to be provisionally respected as a social fact, although the northern white's race feeling seems to be really much more robust than that of the southern white's. The northerner's is simply impregnable, like the self-respect of a gentleman. If the southerner when in the North could conform to northern practice, and the northerner when in the South to southern practice, each without losing caste at home, an amiable *modus vivendi* would be secured.

Again, the northern whites and the southern do not entirely agree with regard to public education. Northern opinion is unanimous in favor of giving the whole southern population—white and black alike—good opportunities for education in every grade, though in separate establishments. It seems to the northern whites that if the southern negroes are to constitute a separate community—separate, that is, with regard to church, school, and all social life—that separate community will need not only industrious laborers and operatives,

active clerks, and good mechanics, but also teachers, preachers, lawyers, physicians, engineers, and indeed professional men of all sorts, and therefore that all grades of education should be made accessible to negro children and youth.

On this subject three different opinions may be discerned among southern whites. Some southern whites, educated and uneducated, think that any education is an injury to the negro race, and that the negro should continue to multiply in the Southern States with access only to the lowest forms of labor, for which they maintain, as Plato did, that no education is necessary. Another section of the southern whites holds that negro children should be educated, but only for manual occupations—that is, for farm work, household work, and work in the fundamental trades, such as the carpenter's, mason's, and blacksmith's. This section approves of manual training and trade schools, but takes no interest in the higher education of the negro. Still a third section of the southern whites recognizes the obvious fact that a separate negro community must be provided with negro professional men of good quality, else neither the physical nor the moral welfare of the negro population will be thoroughly provided for. At the North the higher education of the few young negroes who will reach that grade can be provided in the colleges and professional schools maintained for white youth and is successfully given at this moment to a few negro youth. In the Southern States the higher education must be given in separate institutions, if at all. The northern people hardly realize how heavy the educational burden on the Southern States really is, because at the North they are under no necessity of providing separate institutions of all grades for negroes in addition to those provided for the whites. The pecuniary burden of this separate provision on the relatively poor Southern States is enormous; it is heavy in the elementary schools, but in the higher grades of education it is heavier still in proportion to the numbers to be educated. The provision of a higher education for negroes is the logical consequence of the proposition that the black and white races should both be kept pure; and, as I have said, this proposition is accepted both at the North and at the South. The alternative view, that the negro needs no education, or is harmed by it, or that the race should only be offered the lower grades of education, is thoroughly inconsistent with the proposition that the two races should be kept unmixed. Democratic society can not possibly contemplate the permanent presence of millions of a race but recently delivered from slavery breeding fast and left in ignorance, or even without guidance and incentives to intellectual and spiritual life. Such a suggestion flies in the face of all democratic thought about public justice, liberty, and even safety.

The northern whites have precisely the same dread of an ignorant and corruptible suffrage that the southern whites feel, for they have suffered and are now suffering from it. Millions of immigrants, who have had no practice in civil or religious liberty, have invaded the North, and negro suffrage there has often proved not only unintelligent but mercenary. Their remedy, however, for an ignorant suffrage is to abolish ignorance by patient, generous work on the children. As an aid in this long campaign they value an educational qualification for the suffrage. Moreover, the northern people are having at home abundant illustration of the way crimes increase when portions of the population have emancipated themselves from accustomed restraints, but have not yet been provided with any new effective restraints either from within or from without. In this respect they are prepared to sympathize warmly with their southern brethren, whose situation is even more difficult than their own. Both parts of the country are feeling acutely the same need—the need of a stronger arm for the law, of a permanent, large, pervasive police force, organized in military fashion and provided with all the best means for instantaneous com-

munication between stations. The presence of a competent public force would tend to prevent those sudden gregarious panics which cause lawless barbarities.

In respect to the value of that peculiar form of education which Hampton Institute has so admirably illustrated—education through manual training and labor at trades and crafts—there is a striking agreement between northern and southern opinion. One of the most remarkable changes in public education in the northern States during the past fifteen years has been the rapid introduction of just these features into urban school systems.

The northern whites are beginning to sympathize strongly with their southern brethren in respect to the peculiar burden which the action of the national Government in liberating the negroes has imposed on them. They see that the educational problem at the South is much more difficult than it is at the North and calls for much greater public expenditure. They also perceive that the Southern States are less able than the Northern States to endure public expenditure for education.

In spite of their ingrained preference for local control of education, and for local government in general—a preference which has preserved far too long ward government for schools and cities and district government in country towns—they are beginning to feel that the peculiar burden upon the Southern States, caused by the separation between the black and the white races in the institutions of education, should be borne in part by the National Government. They would like to see devised constitutional means of bringing exceptional aid from the National Treasury to the former slave States which have this exceptional burden to bear. They would like to see the negro schools of the South kept eight months of the year instead of four—at the expense of the nation. They would like to see separate colleges for agriculture and the mechanic arts provided throughout the South by the National Government. They would like to see the southern universities enabled to maintain separate professional schools for colored men. They would like to see a way found for the National Government to spend as much money on solving the southern negro problem as it has been spending for six years past on the Philippine problem. In short, they would like to see the National Government recognize its responsibility for many of the physical and moral difficulties which beset civilization in the Southern States and come to the aid of all the civilizing forces in those States. They know that efficient help could only be given through existing local agencies; and the only help they would wish the Government to give is help to meet the peculiar burdens those agencies now have to bear because of the expedient social separation between the two races which are to occupy together the fair southern country. It was in the supreme interest of the whole nation that the Southern States were impoverished forty years ago by a four years' blockade and the destruction of their whole industrial system. It is fair that the nation should help to rebuild southern prosperity in the very best way, namely, through education.

Finally, let us all remember that the task of making competent free men out of slaves is not the work of a day or a decade, but of many generations. How many Anglo-Saxon generations have gone to dust on the long road from serfdom to freedom! It is a task to be worked at by each successive generation with the eager energy of men who know that for them the night cometh in which no man can work, but with a patience like that of God, who lives and rules forever.

MR. CARNEGIE. We all know what a man the founder of Hampton was, General Armstrong, who was not only great, inspired in himself, but who inspired all who became intimately associated with him; among these his able, untiring

colleague and now his worthy successor. Let me present to you Doctor Frissell, principal of Hampton.

ADDRESS OF DOCTOR FRISSELL.

General Armstrong used to say that life would not be worth living if there were no negro and Indian problems. Those of us who have to do with these races believe that it is well for our great country that it has to think of something else than tariff laws and the gaining of wealth. My friends, this is a tremendous problem. The southern people, white and black, are the burden bearers of this country. In the South is the great mass of ignorance. There, too, is the greatest poverty. The struggle that the South has had to make to support itself is tremendous. Then there is the fact that in that section two races of different color are living together, often suspicious of one another, in constant dread of one another. Certainly the race problem of our country does not lack in interest or importance. If we present the bright side to you, it does not indicate that we do not know that there is a dark side, or that we do not appreciate the gravity of the situation. The great problem before us is this: How are men differing in wealth, station, race, to learn to live together so as to be mutually helpful? How may the rich and poor, the employer and the employee, the white man and the black man, learn to serve instead of hating and hindering one another?

When my distinguished predecessor at Hampton went to the Virginia peninsula immediately after the war, he went as an agent of the Freedmen's Bureau to administer the affairs of the whites and the blacks. He was sent to help them to live together in freedom as they had formerly lived together in slavery. He approached his task with sincere sympathy and with faith in both races. He did not believe, as some of us at the North did, that we were to help the blacks to punish the southern whites for their wickedness. He had been an officer in the Union Army and had come in battle to have a profound regard for the heroism of the southern white man. He had been a colonel of colored troops, and had come to understand the capacity and bravery of the colored man under proper leadership. He had been brought up in the Sandwich Islands, where he had helped his father, as superintendent of public education, to work out the problem of how different races could live and work together. He had come to believe that two peoples, in order to live together successfully, must be mutually serviceable. Training for useful service, then, became the thought of his life and of the great school which he started at Hampton. Many were inclined to doubt whether the black man could be made to serve except by force. General Armstrong had a firm belief that he could learn to serve by love.

An old negro preacher once prayed this prayer: "Lord, make the unfit fit and the fitter more fitting." This was the thought of the Hampton school—to make the unfit fit for the life just ahead of them. How could they best be fitted to serve themselves, their people, and their white neighbors? I should be glad to speak to you briefly of Hampton's methods and results. Down at the foundation of Hampton Institute lies the idea of labor. All education there has for its object the fitting of the student for work. The school is a large industrial village, with its workshops, its farms, its laboratories, and its schoolrooms, where the young are taught how to live and labor. The charge that is brought against the black race more often than any other is that they are unreliable, that they do not take responsibility well. The Indian is universally accused of being lazy. It is of the first necessity, then, to teach negro and Indian boys and girls to do some work, to do it regularly, and to do it intelligently. This work, whether in the shop, in the kitchen, or on the farm, is made the central point of the school's endeavor. The academic work becomes subsidiary. Our

students must learn, as Mr. Washington has put it, "to do common things in an uncommon way." As soon as they enter Hampton, therefore, they take up some definite duty, and their studies center in that. A large number of girls, when they first come to Hampton, go into the laundry. We consider this one of the most important educational departments of the Hampton school. The work of washing and mending clothes has been lifted out of stupid drudgery into a valuable educational process. The laundry work not only enables the girls to gain regular habits of labor, to earn their board and clothing while they are in school, and to be able to make an honest living wherever they go, but it is also distinctly educational. The work is so arranged that they pass from one problem to another as they would in the schoolroom. In the evening, after their work is done, they go to the laboratory and try experiments in making bluing and soap. They learn what makes water hard and how they can make it softer. With the help of the microscope they study woolen cloth under the action of hot and cold water, and learn how to wash it properly and the reasons for certain methods. They learn how cloth is made and are taught how to weave it. Then, when they go into their English class, they write and read about what they have seen and have done with their own hands. Their arithmetic, too, has to do with soap and bluing and gallons of water and pieces of clothing. This method of correlation applies also to our other industries. We are just putting up a new kitchen, and that will be a much more important classroom than any in our academic hall. When the spring days come the school garden will be filled with negro and Indian girls, each planting or cultivating her own plot of ground. Other girls will be found carrying on the dairy work, and still others caring for the chickens. Every boy and girl at Hampton is given some practical knowledge of agriculture. Every girl must be able before she graduates to make a dress for herself and to cook a good meal. Every boy must be able to work in wood and iron. In addition they receive a thorough knowledge of the rudiments of an English education, and a careful training in morals and manners. Perhaps more important than anything else is the spirit of kindness toward others that the Hampton student gains. "Cantankerousness is worse than heterodoxy," wrote General Armstrong. Neither students nor teachers are allowed to remain long unless they can work with others. Hate, racial or individual, is excluded.

Now, this kind of training produces three things. First, it develops character. The struggle toward self-support, the regular hours of labor combined with study, the military drill, and the religious instruction unite to make strong characters of these men and women. In the second place, this training produces economic independence. No graduate of Hampton becomes a drag on the community to which he goes. With his knowledge of agriculture and the trades he becomes a self-respecting and useful citizen. He is not only able to sustain himself, but also to help others to self-support. Sixty-five per cent of those who have learned trades at Hampton are practicing or teaching them. Eighty-seven per cent of the school's living graduates are known to be profitably employed. Many are leaders in business enterprises; 35 per cent are farmers, tradesmen, or part-time farmers, and a very large number are teachers of industries. We have now in almost every State of the South industrial schools carried on by graduates of Hampton. At the head of Tuskegee is Mr. Washington, Hampton's most distinguished graduate. His brother, Mr. J. H. Washington, superintendent of his industries; Mr. Logan, his treasurer; his disciplinarian, his head farmer, and a large company of other Hampton men and women have aided in building up this remarkable institution. In the third place, the Hampton training has produced young men and women of reasonable intelligence. While the great mass of our returned students have gone into the country districts, the leading colored city public schools in the State of Virginia are

to-day in the hands of Hampton's sons and daughters. Sixteen per cent have entered the professions, and a number have been graduated with honor from the highest institutions in the land, demonstrating the ability of the race to meet the hardest intellectual tests.

I suppose most of you have read an article on "The negro woman" in a recent periodical. It told many sad truths about our sisters in black. It was kindly in spirit, but it showed little knowledge of the thousands and thousands of decent, pure negro homes in the South. One of the most important facts about the present situation is the ignorance of the average southern white man and woman in regard to the best class of negroes. The average southern white man seldom visits a negro church, does not go into his schools, does not read his newspapers, and knows little of the clean Christian negro homes that are growing up all around him. He knew both the good and bad negro in slavery; now he knows mostly the bad. Perhaps you have seen that terrible book, *The Negro a Beast*. As a southern man said to me, "The worst thing about that book is that the man who wrote it believed what he wrote." Perhaps, as you have read that one-sided book, *The Leopard's Spots*, you have thought that the mass of the negroes were hateful and bitter. They are not, as southern men have often testified. There never was a kinder race. The great mass of them are making an earnest struggle out of the darkness into the light. When the Russian serfs were freed and education made compulsory, the schoolhouses were burned down, and when an endeavor was made to compel them to go to school the homes of the nobles began to burn. Contrast with this the attitude of the negro toward education. Every negro school in the South is crowded to-day. Hampton refused last year six times as many applicants as could be accepted. I could tell you of hundreds of negro parents who are denying themselves the necessities of life in order to give their children an education. When you hear that the negroes are all bad and daily growing worse, will you remember that in spite of all their difficulties the negroes have accumulated property since the war amounting to \$300,000,000 in farms, houses, and various business establishments; that they have themselves raised toward their own education more than \$13,000,000; that they have accumulated in church property more than \$40,000,000, and in school property \$15,000,000. When you hear that they are hopelessly immoral and criminal, will you remember that this great country of ours set them free without making any adequate provision for their physical, moral, or intellectual education?

But you need concrete examples to help you to understand the work of Hampton graduates and ex-students. I have asked to have placed in your seats a short story called "The Failure of Cunningham." It is an account of a dull colored boy who was unable to make his way through the school, and was obliged to return to his home in the back country. It tells how one of his former teachers found him in a poor log schoolhouse and of the tremendous influence for good he exerted in his community. Will you take it home and read it? It will give you an idea of what hundreds of the dullest of Hampton's returned students have done. But let me give you a few illustrations of the service performed by more intelligent Hampton men and women.

Last Monday I went to the home of two of our graduates on one of the side streets of Hampton. This couple have a comfortable frame house of six rooms, which they have paid for from their earnings. The husband has been a book-keeper in the school treasurer's office since his graduation in 1885. The wife, who was a graduate of the previous year, went back to her home in Georgia and taught for a year in a country school, spending her Saturdays in going from house to house and showing the people how to make their homes comfortable,

and her Sundays in instructing old and young out of God's Word. After a year of this work she returned to the town of Hampton and married the young man of whom I have spoken. Her home became, as do those of most of our graduates, a sort of social settlement. Every week on Thursday a company of girls who were out at service gathered to learn how to cook and sew. Her girls' club has grown from ten or twelve to over a hundred members, and her efforts to help the neighborhood in various ways have developed into real social settlement work. Her husband has built a clubhouse as a center for this work on the lot adjoining his own, and here, three days in a week, gather large classes in plain sewing, hemstitching, shirt-waist making, basketry, and cooking. A kindergarten class meets in a little upper room in her shed. A boys' club has been started, and in the summer there is a class in gardening. A song service is held every Sunday. In all these activities she is assisted by three other Hampton graduates, who give their services cheerfully. The head of the settlement keeps in touch with the white women who employ her girls, and assists in adjusting difficulties when they occur. She keeps her own house and cares for her three children, makes her own garden, and still finds time to help her neighbors make theirs. The whole community is cleaner and better because this young woman lives there. Work similar to this is being done by scores of Hampton women in Virginia, the Carolinas, and the Black Belt of Alabama.

The work of the husband of our Hampton settlement worker is no less important than her own. Soon after his graduation several of the graduates of the school joined with the people of the town to form a colored building and loan association. The young man of whom I am speaking became the secretary and mainstay of the association. It commenced business in 1889, with 12 stockholders and 18 shares of stock. It has grown until now it has 636 stockholders, owning 2,212 shares, and a paid-in stock of \$105,000, of which the colored people alone own \$75,000. More than \$200,000 has been loaned to colored people of the vicinity, more than 350 pieces of property have been acquired and homes built through its aid, and it has long been regarded as one of the safest financial institutions in Hampton. It is difficult to estimate the influence of this one home of Hampton graduates.

When I first went to Hampton twenty-four years ago I went into an evening class called the "plucky class." It was composed of boys who had worked all day in the sawmill or on the farm. The teacher was a Hampton graduate—the distinguished speaker of this evening. Just what this one Hampton graduate has meant to this country, and the influence that he has had over his own race in teaching them kindness and patience and industry, can never be estimated. General Armstrong was right in saying that if Hampton had done nothing else than graduate Booker Washington it would have paid for itself. In Mr. Washington's class was a small, thick-lipped negro boy from a back county. He had come with no money, and was working his way through the school by his labor in our sawmill. After graduation he went back to his home and took a school. The little building was soon too small for the crowds that came to him. He determined to enlarge it. This he did himself with the help of his boys, who worked Saturdays on the land in order to raise the money. After he had succeeded in getting his own school in order he induced other Hampton boys and girls to come to his county as teachers. He built his own home and cultivated land. Almost all the colored people in his county were renters. He helped them to buy land and build homes. The churches were improved. The migration from that county to Northern cities has been stopped. It is now more than five years since a negro has gone from that county to the penitentiary. Ninety per cent of its negro farmers own and manage their land. The relations

between the whites and blacks are of the best. Not only in his own county, but through all of tide-water Virginia has the influence of that man been felt. He has driven out the saloon from a number of counties, and has helped to increase landholding, so that in thirty-three counties of tide-water Virginia more than 70 per cent of the negro farmers own and manage their land.

In my early days at Hampton I had a class of negro preachers. They used to come from all the country around, spend the week at Hampton and go back to their homes to preach on Sunday. I tried to teach them the doctrine of making the Kingdom of God come here in better, cleaner homes. One of them became inspired with the idea of being a sort of "shepherd of Kingdom Come" among his people. He had a little church one mile outside the city of Portsmouth in Virginia. Here he started a model negro settlement. He bought thirty acres of land, divided it into building lots, and commenced to sell to colored people working in Norfolk and Portsmouth. When the settlement began, \$500 would have bought all the property owned by colored men there. They now own over 125 buildings, costing from \$350 to \$2,500 each. Over 300 colored people live there, and there has never been an arrest nor has there been a saloon in the town. The morals and the order of the place are as good as anywhere in the South. The Hampton student did become "the shepherd of Kingdom Come."

No other Hampton graduate, and perhaps no other Indian, has had more to do with the surveying and allotting of Indian lands than Thomas Wildcat Alford, an Absentee Shawnee, of Shawnee, Okla. Beginning his career after graduating from Hampton in 1882 as a Government teacher, Mr. Alford has acted successively as interpreter, surveyor, allotting agent, real-estate agent, and farmer, gradually becoming the most influential Indian among the Shawnees. Acting first as axeman in the surveyor's corps he soon rose to the position of compass man at \$4 a day. He acted as allotment surveyor for the Shawnees, Kickapoos, and Sauk and Foxes, being also county surveyor for one year. In 1894 he was appointed chairman of the Absentee Shawnee Business Committee, which has charge of all negotiations concerning Indian lands. He is also secretary of the general council appointed to decide questions of importance to the Shawnees, and has several times visited Washington on business for his people. Mr. Alford is at present acting as clerk at the Shawnee Agency and at the same time is cultivating a model farm, where he raises his own vegetables, fruits and meats. His neat frame house, his log kitchen, stable and sheds were built with his own hands. He has sent three sons to Hampton, one of whom was graduated last year.

One Sunday a colored boy at Hampton named Sheppard went with me to establish a mission station at a place called Slabtown, a little out from the school. He gained there, as he afterwards said, his first idea of missionary work. After leaving Hampton he became a missionary of the Presbyterian Church, South, and was sent with a son of Judge Lapsley, a prominent Southern white man, to Luebo, a station 1,000 miles from the west coast of Africa, on a branch of the Congo. Both these missionaries became interested in the Bakuba, who lived 50 miles farther inland but often passed their doors carrying ivory and rubber to the traders. Although the king of these people had forbidden all foreigners, on pain of death, to visit his territory, these missionaries decided to go to them. Sheppard learned their language from the men who came to his door. The white missionary, Lapsley, died, but with much courage and tact Sheppard pushed his way into the Bakuba country. Because of his discoveries on that journey he was made a Fellow of the Royal Geographical Society. Instead of being beheaded by the chief of the Bakuba, he was well received and given much power. He has built a large church where recently sixty converts

were baptized on one Sabbath. A late number of *The Missionary* said of him: "He not only builds churches and preaches the gospel and beautifies the land with broad avenues and boulevards, but, like Luke, he is also the beloved physician. He is known, loved and revered by the natives far and wide." Still another Hampton student, who went as a missionary to Liberia, not only preaches but has a large coffee farm and has been practicing the blacksmith's trade which he learned at Hampton. One of his last letters tells of having just completed the only iron bridge ever built in Liberia.

I have given you a very imperfect account of the results of Hampton's work. Not only has it sent out between 7,000 and 8,000 negro and Indian students into every part of the South and West, but it has influenced the education of the whole country. The Government Indian industrial schools have been directly modeled after Hampton, and largely through its influence industrial training is being introduced into all the schools of the South. The chairman of the board of education of one of our large northern cities said in a public address that Hampton had done more to bring about the introduction of manual training into the schools of his city than any other influence. The West Indies, too, are being influenced by Hampton, not only through the students who are being sent back there, but by the delegations that are sent from the islands to study its methods. Former Hampton teachers have gone to General Armstrong's island home, and the most important school in Honolulu is in their care. More important than the direct is the indirect influence of Hampton. In an admirable article in a recent number of the *Atlantic Monthly*, Doctor Washington shows how industrial education, as started by General Armstrong at Hampton, has had the result of bringing together not only the whites and blacks of the South, but the whites of the North and South in an endeavor to work out this great problem. The southern and general education boards would hardly have been possible without it.

At the opening of the present school year there were over 1,200 negro and Indian boys and girls receiving instruction on the Hampton grounds—800 boarders and 400 day scholars. Five hundred student-teachers were gathered from every part of the South in attendance upon its summer school of six weeks. Our annual expenses are \$180,000, about \$100,000 of which is provided for by interest on the endowment fund, on one-third of the land-scrip fund of the State of Virginia, the Slater fund, the Morrill Act fund, and an annual appropriation by Congress toward the support of 120 Indians. An appeal has to be made each year for \$80,000 to meet the school's current expenses. One-eighth of this amount has been provided for the last two years by the generous chairman of this meeting, Mr. Carnegie. The remaining \$70,000, together with provision for the school's permanent improvements, is given sums varying from \$1 to \$5,000. Several friends have given \$1,000 a year for the last two years. Much of the time of the school's officers, which ought to be given to the institution itself, has now to be spent in raising the necessary funds. Since General Armstrong's death in 1893 the school's endowment has been increased from \$360,000 to \$1,200,000. It needs an endowment of \$2,000,000. While it would still be obliged to appeal to the public, the strain of securing so large an amount each year would be removed. The increased cost of coal and provisions, together with the larger number of students, makes the present year an especially hard one. Seventy dollars pays the scholarship of a student for a single year. In a book called "Twenty-two Years' Work at Hampton" there are given hundreds of such stories as I have told you of Hampton's graduates. Mentioned in connection with these are the names of some of the best men and women of this country, who have made those lives possible. In General Armstrong's "Memo-

randa" is found this appeal: "Hampton must not go down. See to it, you who are true to the black and red children of the land, and to just ideas of education."

MR. CARNEGIE. Now we come to the last speaker. What shall I say, or how introduce him to you? Fellow-slave of Epictetus and destined to be as renowned in history. Starting where he did I know of no man living who has traveled so far onward and upward. Read his memorable book, *Up from Slavery*, and behold him to-day the recognized Moses of his race, who is leading it up to a standard worthy of citizenship and the suffrage. Hereafter history is to tell of two Washingtons—one white, the other black; both fathers of their people. It is with extreme pleasure I now present to you Booker Washington.

ADDRESS OF DOCTOR WASHINGTON.

The anniversary of the birth of Abraham Lincoln and the presentation of the claims of the Hampton Institute furnish a fitting occasion to discuss the condition of my race.

Several persons holding high official position have recently said that it does not pay, from any point of view, to educate the negro, and that all attempts at his education have so far failed to accomplish any good results. Except that these utterances come from official sources, they would have little claim to a place in a meeting of this character. But the Southern States, which out of their poverty are contributing rather liberally for the education of all the people, as well as individual and organized philanthropy throughout the country, have a right to know whether the negro is responding to the efforts they have made to place him upon a higher plane of civilization.

It is not possible to improve the condition of any race until its mind is awakened and strengthened. Does the American negro desire to improve his mind, and what has been the result of his efforts? Will it pay to invest further money in this direction? In partially answering this question it is hardly fair to compare the progress of the American negro with that of the American white man, who in some unexplained way got thousands of years ahead of the negro in the arts and sciences of civilization. But, to get at the real facts and the real capability of the black man, let us compare for a moment the American negro with the negro in Africa, or the black man with the black man. As was recently suggested by Mr. Carnegie, in South Africa alone there are 5,000,000 black people who have never been brought, through school or other agencies, into contact with a higher civilization, in a way to have their minds or their ambitions strengthened or awakened. As a result, the industries of South Africa languish and refuse to prosper for lack of labor. The native black man refuses to labor, because he has been neglected. He has few wants and little ambition, and his crude and few wants may be satisfied by laboring one or two days out of the seven. In the southern part of the United States there are more than 8,000,000 of my race who, both by contact with the whites and by education in the home, in school, in church, have had their minds awakened and strengthened—have thus had their wants increased and multiplied many times. Hence, instead of a people in idleness, we have in the South a people who are anxious to work because they want education for their children; they want land and houses, and churches, books, and papers. In a word, they want the highest and best in our civilization. Looked at, then, from the most material and selfish point of view, it has paid to awaken the negro's mind, and there should be no limit placed upon the development of that mind.

Does the American negro take advantage of opportunities to secure educa-

tion? Practically no schoolhouse has been opened for the negro since the war that has not been filled. Often hungry and in rags, making sacrifices of which you little dream, the negro youth has been determined to annihilate his mental darkness. With all his disadvantages the negro, according to official records, has blotted out 55.5 per cent of his illiteracy since he became a free man, while practically 95 per cent of the native Africans are illiterate. After years of civilization and opportunity in Spain, 68 per cent of the population are illiterate; in Italy, 38 per cent. In the average South American country about 80 per cent are illiterate, while after forty years the American negro has only 44.5 per cent of illiteracy to his debit. I have thus compared the progress of my race not with the highest civilized nations, for the reason that, in passing judgment upon us, the world too often forgets that, either consciously or otherwise, because of geographical or physical proximity to the American white man, we are being compared with the very highest civilization that exists.

Having seen that the American negro takes advantage of every opportunity to secure an education, I think it will surprise some to learn to what an extent the race contributes toward its own education and works in sympathetic touch with the whites at the South. In emphasizing this fact I use the testimony of the best southern white men. Says the State superintendent of education of Florida in one of his recent official reports: "The following figures are given to show that the education of the negroes of middle Florida (the black belt of Florida) does not cost the white people of that section one cent." In those eight black belt counties the total cost of the negro schools is \$19,457. The total contributed by the negro in direct and indirect taxes amounted to \$23,984, thus leaving a difference of \$4,527 which, according to the superintendent, went into white schools. In Mississippi for the year ending in 1899, according to an eminent authority, the negroes had expended on their schools about 20 per cent of the total school fund, or a total of about \$250,000. During the same year they paid toward their own education in poll taxes, State, county, and city taxes, and indirect taxes, about \$280,000, or a surplus of about \$30,000. So that, looked at from any point of view, it would seem that the negroes in that State are in a large measure paying for their own education.

But all this has little to do with my main purpose, and that is to emphasize the fact that with all the negro is doing for himself, with all the white people in the South are doing for themselves, and despite all that one race is doing to help the other, the present opportunities for education are woefully inadequate for both races. In the year 1877-78 the total expenditure for education in the ex-slave States was a beggarly \$2.61 per capita for whites and only \$1.09 for blacks; on the same basis the United States Commissioner of Education reasons that for the year 1900-1901, \$35,400,000 were spent for the education of both races in the South, of which \$6,000,000 went to negroes, or \$4.92 per capita for whites and \$2.21 for blacks; on the same basis, each child in Massachusetts has spent upon his education \$22.35 and each one in New York \$20.53 yearly.

From both a moral and religious point of view, what measure of education the negro has received has paid, and there has been no step backward in any State. Not a single graduate of the Hampton Institute or of the Tuskegee Institute can be found to-day in any jail or State penitentiary. After making careful inquiry, I can not find a half dozen cases of a man or woman who has completed a full course of education in any of our reputable institutions, like Hampton, Tuskegee, Fisk, or Atlanta, who are in prisons. The records of the South show that 90 per cent of the colored people in prisons are without knowledge of trades and 61 per cent are illiterate. This statement alone disproves the assertion that the negro grows in crime as education increases. If the

negro at the North is more criminal than his brother at the South, it is because the North withholds from him the opportunity for employment which the South gives. It is not the educated negro who has been guilty of or even charged with crime in the South; it is, as a rule, the one who has a mere smattering of education or is in total ignorance. While the negro may succeed in getting into the State prison faster, the white man in some inexplicable manner has a way of getting out faster than the negro. To illustrate: The official records of Virginia for a year show that one out of every three and one-half white men were freed from prison by executive clemency, and that only one out of every fourteen negroes received such clemency. In Louisiana it is one to every four and one-half white men and one to every forty-nine negroes. So that when this feature is considered matters are pretty well evened up between the races.

As bearing further upon the tendency of education to improve the morals of the negro, and therefore to prolong his life, no one will accuse the average New York insurance company of being guided by mere sentiment toward the negro in placing its risks; with the insurance company it is a question of cold business. A few months ago the chief medical examiner for the largest industrial insurance company in America stated that after twenty years' experience and observation his company had found that the negro who was intelligent, who worked regularly at a trade or some industry and owned his home was as safe an insurance risk as a white man in the same station in life.

Not long ago a Southern white man residing in the town of Tuskegee, who represents one of the largest and most wealthy accident and casualty companies in New York, wrote to his company to the effect that while he knew his company refused to insure the ordinary, ignorant colored man, at the Tuskegee Institute there were some 150 officers and instructors who were persons of education and skill, with property and character, and that he, a Southern white man, advised that they be insured on the same terms as other races; and within a week the answer came back: "Insure without hesitation every negro on the Tuskegee Institute grounds of the type you name." The fact is that almost every insurance company is now seeking the business of the educated negro. If education increased the risk, they would seek the ignorant negro rather than the educated one. As bearing further upon the effect of education upon the morals of the negro during the last forty years, let us go into the heart of the black belt of Mississippi and inquire of Alfred Holt Stone, a large and intelligent cotton planter, as to the progress of the race. Mr. Stone says:

The last census shows that the negro constitutes 87.6 per cent of the population of the Yazoo-Mississippi Delta. Yet we hear of no black incubus; we have had few midnight assassinations, and fewer lynchings. The violation by a negro of the person of a white woman is with us an unknown crime; nowhere else is the line marking the social separation of the two races more rigidly drawn; nowhere are the relations between the two more kindly. With us race riots are unknown, and we have but one negro problem, though that constantly confronts us, how to secure more negroes.

There are few higher authorities on the progress of the negro than Joel Chandler Harris, of the Atlanta Constitution, of "Uncle Remus" fame. Mr. Harris had opportunity to know the negro before the war, and he has followed his progress closely in freedom. In a printed statement two weeks ago Mr. Harris says:

In spite of all, however, the condition of the negro has been growing better. We can not fairly judge a race, or a country, or a religious institution, or a social organization, or society itself, nay, not the Republic in which we take pride, unless we measure it by the standard set up by the men who are its best representatives,

We are in such a furious hurry. We are placed in a position of expecting a race but a few years from inevitable ignorance, imposed on it by the conditions of slavery, to make the most remarkable progress that the world has ever heard of, and when we discover that in the nature of things this is impossible, we shake our heads sadly and are ready to lose heart and hope.

The point I desire to make is that the overwhelming majority of the negroes in all parts of the South, especially in the agricultural regions, are leading sober and industrious lives. A temperate race is bound to be industrious, and the negroes are temperate when compared with the whites. Even in the towns the majority of them are sober and industrious. The idle and criminal classes among them make a great show in the police court records, but right here in Atlanta the respectable and decent negroes far outnumber those who are on the lists of the police as old or new offenders. I am bound to conclude from what I see about me, and from what I know of the race elsewhere, that the negro, notwithstanding the late start he has made in civilization and enlightenment, is capable of making himself a useful member in the communities in which he lives and moves, and that he is becoming more and more desirous of conforming to all the laws that have been enacted for the protection of society.

In connection with this testimony from Joel Chandler Harris, may I add, no one has a right to pass final judgment upon the moral status of a race unless he has visited the homes, the intellectual gatherings, the schools and churches, where he can observe something of the higher life of that people. Our moral progress must not be judged by the man on the street. You may not know it, but the moral lines are beginning to be as strictly drawn in my race as in yours, and it must not be forgotten that we are as proud of our race as you are of yours, and that the more progress we make in education the more satisfaction do we find in our homes and social circles.

We are to live in the South, and sympathy between the races is vital, and we must convince the southern white people of the value of educating the negro, and this we are doing, according to the testimony of southern people themselves.

Some time ago I sent out letters to representative southern men, covering each ex-slave State, asking them, judging by their observation in their own communities, what effect education had upon the negro. To these questions I received 136 replies, as follows:

1. Has education made the negro a more useful citizen?

Answer. Yes, 121; no, 4; unanswered, 11.

2. Has it made him more economical and more inclined to acquire wealth?

Answer. Yes, 98; no, 14; unanswered, 24.

3. Does it make him a more valuable workman, especially where skill and thought are required?

Answer. Yes, 132; no, 2; unanswered, 2.

4. Do well-trained, skilled negro workmen find any difficulty in securing work in your community?

Answer. No, 117; yes, 4; unanswered, 15.

5. Are colored men in business patronized by the whites in your community?

Answer. Yes, 92; no, 9; unanswered, 35. (The large number of cases in which this question was not answered is due to scarcity of business men.)

6. Is there any opposition to the colored people's buying land in your community?

Answer. No, 128; yes, 3; unanswered, 5.

7. Has education improved the morals of the black race?

Answer. Yes, 97; no, 20; unanswered, 19.

8. Has it made his religion less emotional and more practical?

Answer. Yes, 101; no, 16; unanswered, 19.

9. Is it, as a rule, the ignorant or the educated who commit crime?

Answer. Ignorant, 115; educated, 3; unanswered, 17.

10. Does crime grow less as education increases among the colored people?

Answer. Yes, 102; no, 19; unanswered, 15.

11. Is the moral growth of the negro equal to his mental growth?

Answer. Yes, 55; no, 46; unanswered, 35.

But it has been said that the negro proves economically valueless in proportion as he is educated. Let us see. All will agree that the negro in Virginia, for example, began life forty years ago in complete poverty, scarcely owning clothing or a day's food. Right here I lay emphasis upon conditions in Virginia for the reason that the Hampton Institute, whose claims we are considering, is located in that State, and is the oldest and most widely known of all our schools. From an economic point of view, what has been accomplished for Virginia alone largely through the example and work of the graduates of Hampton and other large schools in that State? The reports of the State auditor show that the negro to-day owns at least one twenty-sixth of the total real estate in that Commonwealth, exclusive of his holdings in towns and cities, and that in the counties east of the Blue Ridge Mountains he owns one-sixteenth. In Middlesex County he owns one-sixth; in Hanover, one-fourth. In Georgia the official records show that, largely through the influence of educated men and women from Atlanta schools and others, the negroes added last year \$1,526,000 to their taxable property, making the total amount upon which they pay taxes in that State alone \$16,700,000. From nothing to \$16,000,000 in one State in forty years does not seem to prove that education is hurting the race very much. Relative progress has taken place in Alabama and other Southern States. Every man or woman who graduates from the Hampton or Tuskegee institutes, who has become intelligent and skilled in any of the industries of the South, is not only in demand at an increased salary, on the part of my race, but there is equal demand from the white race. One of the largest manufacturing concerns in Birmingham, Ala., keeps a standing order at the Tuskegee Institute to the effect that it will employ every man who graduates from our foundry department. When the South had a wholly ignorant and wholly slave negro population she produced about 4,000,000 bales of cotton; now she has a wholly free and partly educated negro population and the South produces nearly 10,000,000 bales of cotton, besides more food products than were ever grown in its history. In the making of these statements it should not be overlooked that it is not the negro alone who produces cotton, but it is his labor that produces most of it. And while he may pay a small direct tax, his labor makes it mighty convenient for others to pay direct taxes.

Judged purely from an economic or industrial standpoint, the education of the negro is paying, and will pay more largely in the future in proportion as educational opportunities are increased. A careful examination shows that of the men and women trained at the Hampton and Tuskegee schools not 10 per cent can be found in idleness at any season of the year. They have learned the beauty of work, the disgrace of idleness. But my real object, I beg to repeat, is not to enter into a controversy on this or that point of the progress of the race, but to emphasize the fact that, with all the negro is doing to help himself, with all that the southern white people are doing, that the opportunities for education for my race are inadequate almost beyond description, and the same may be said of the poor white people in certain sections of the South.

Years ago some one asked an eminent clergyman in Boston if Christianity is a failure. The reverend doctor replied that it had never been tried. When people are bold enough to suggest that the education of the negro is a failure, I reply

that it has never been tried. The fact is that 44.5 per cent of the colored people in this country to-day are illiterate. A very large proportion of those classed as educated have the merest smattering of knowledge, which means practically no education. Can the negro child get an education in school four months and out of school eight months? Can the white child of the South, who receives \$4.92 per capita for education, or the black child, who receives \$2.21, be said to be given an equal chance in the battle of life, or has education been tried on them? The official records in Louisiana, for instance, show that less than one-fourth of the negro children of school age attend any school during the year. This one-fourth was in school for a period of less than five months, and each negro child of school age in the State had spent on him for education last year but \$1.89, while each child of school age in the State of New York had spent on him \$20.53. In the former slave States 90 per cent of the negro children of school age did not attend school for six months during the year 1900.

I would seek to convince you that wherever the race is given an opportunity for education it takes advantage of that opportunity, and that the change can be seen in the improved material, educational, moral, and religious condition of the masses. Contrast two townships, one in Louisiana, where the race has had little chance, with one in Farmville, Va., says the United States Bulletin of the Department of Labor. In the Louisiana township only 10 per cent attend school, and they attend for but four months in a year, and 71 per cent of the people are illiterate. And as a result of this ignorance and neglect we find only 50 per cent of the people living together as man and wife are legally married. Largely through the leadership of Hampton graduates 56 per cent of the black children in Farmville, Va., attend either public or private school from six to eight months. There is only 39 per cent of illiteracy. Practically all the people living together as man and wife are legally married, and in the whole community only 15 per cent of the births are illegitimate.

But the vital point which I want to emphasize is the disposition of the negro to exercise the self-help in the building up of his own schools in connection with the State public school system. Wherever we send out from Hampton, Tuskegee, or any of our southern colleges a negro leader of proper character, he shows the people in most cases how to extend the school term beyond the few months provided for by the State. Out of their poverty the Southern States are making a tremendous effort to extend and improve the school term each year, but while this improvement is taking place the negro leaders of the character to which I have referred must be depended upon largely to keep alive the spark of education. But when all this has been said, the question as to the elevation of the black man goes deeper than the interests of the Hampton Institute, deeper than the interests of a single race, deeper than the interests of the South. In the last analysis it means that we shall have in this country either a democratic form of government or a mere sham and semblance of the same.

It now seems settled that the great body of our people are to reside for all time in the southern portion of the United States. Since this is true there is no more helpful and patriotic service than to help cement a friendship between the two races that shall be manly, honorable, and permanent. In this work of molding and guiding a public sentiment that shall forever maintain peace and good will between the races on terms commendable to each, it is on the negro who comes out of our universities, colleges, and industrial schools that we must largely depend. Few people realize how, under the most difficult and trying circumstances, during the last forty years, it has been the educated negro who counseled patience, self-control, and thus averted a war of races. Every negro

going out from our institutions properly educated becomes a link in the chain that shall forever bind the two races together in all the essentials of life.

Finally, reduced to its last analysis, there are but two questions that constitute the problem of this country so far as the black and white races are concerned. The answer to the one rests with my people, the other with the white race. For my race one of its dangers is that it may grow impatient and feel that it can get upon its feet by artificial and superficial efforts rather than by the slower but surer process, which means one step at a time through all the constructive grades of industrial, mental, moral, and social development which all races have had to follow which have become independent and strong. I would counsel: We must be sure that we shall make our greatest progress by keeping our feet on the earth, and by remembering that an inch of progress is worth a yard of complaint. For the white race the danger is that in its prosperity and power it may forget the claims of a weaker people, may forget that a strong race, like an individual, should put its hand upon its heart and ask if it were placed in similar circumstances how it would like the world to treat it; that the stronger race may forget that in proportion as it lifts up the poorest and weakest, even by a hair's breadth, it strengthens and ennobles itself.

All the negro asks is that the door which rewards industry, thrift, intelligence, and character be left as wide open for him as for the foreigner who constantly comes to our country. More than this he has no right to request. Less than this a republic has no right to withhold.

Neither must the nation grow impatient and faithless. It must remember that during the last forty years the South has been passing through a tremendous industrial and social crisis. This is true of the white race, equally true of the black race. The change from slavery to freedom could not be accomplished without mistakes on both sides, without each race going to extremes. Time, the great leveler, will exercise a modifying, a sobering influence upon all concerned, and in all proper directions.

With all his faults the negro rarely betrays a trust or manifests a spirit of ingratitude. Whenever he has been called upon to render service in behalf of his State or nation such service has been ungrudgingly given. Further—whether in ignorance or in intelligence, whether in slavery or in freedom—the negro has always been true to the Stars and Stripes and the best interests of the nation, and no black-skinned citizen has ever lifted his hand to strike down the Chief Magistrate of the nation or raised the red flag of anarchy. For every dollar that is put into our education by the North or South through such agencies as the Hampton Institute the race will more than repay by a life of industry, intelligence, high Christian character, and in helpful friendship between the races; and because of our elevation it shall be said of the South: "The wilderness and the solitary place shall be glad, and the desert shall rejoice and blossom as the rose."

CHAPTER VII.

TEMPERANCE INSTRUCTION IN PUBLIC SCHOOLS AND THE LIQUOR QUESTION.^a

CONTENTS: (1) Report on temperance, physiology, and hygiene in the schools of Connecticut.—(2) Report of the New York State central committee on the study of physiology and hygiene.—(3) The battle against alcohol in the United States.—(4) Temperance instruction in Prussia.—(5) Report on temperance instruction in western Massachusetts.

REPORT ON TEMPERANCE, PHYSIOLOGY, AND HYGIENE IN CON- NECTICUT SCHOOLS.

[From the Report of the Connecticut Board of Education, 1902, pp. 191-200.]

The law relating to the teaching of physiology and hygiene was modified by the legislature of 1901.

The law prior to 1901 and the law of 1901 are given:

LAW 1893-1901.

SECTION 1. The nature of alcoholic drinks and narcotics, and special instruction as to their effects upon the human system, in connection with the several divisions of the subject of physiology and hygiene, shall be included in the branches of study taught in the common or public schools, and shall be studied and taught as other like required branches, by the use of graded text-books in the hands of pupils

LAW OF 1901.

SECTION 1. The effects of alcohol and narcotics on health, and especially on character, shall be taught in connection with hygiene, as a regular branch of study to all pupils above the third grade in all graded public schools except public high schools.

SEC. 2. Suitable text-books of physiology and hygiene, which explain the effects of alcohol and narcotics on the human system,

^a The following information relating to temperance instruction has appeared in recent Reports of the Commissioner of Education:

Report of 1898-99: "Antialcoholic instruction in French schools" (Vol. I, chap. 21, pp. 1098-1103).

Report of 1899-1900: "Alcoholic physiology and superintendence," by Prof. W. O. Atwater (Vol. I, chap. 8, pp. 584-602).—"The rôle of the school-teacher in the struggle against alcoholism," by A. Sluys, director of Brussels (Belgium) Normal School (chap. 9, pp. 603-614).—"Temperance physiology," by Mrs. Mary Hunt (chap. 21, pp. 1277-1280).

Report of 1901: (1) "Is there too much temperance matter in the school physiologies?" by Mary H. Hunt.—(2) Report of a committee of the Department of Superintendence.—(3) "Temperance teaching and recent legislation in Connecticut," by Supt. W. B. Ferguson, of Middletown, Conn.—(4) Temperance instruction in Nebraska.—(5) "The modern subjection of science and education to a propaganda," by Prof. Wm. T. Sedgwick, of the Massachusetts Institute of Technology.—(6) "The will of the people, not of an oligarchy," by Mary H. Hunt.—(7) Alcoholic physiology in school.—(8) Enforced temperance among railway employees.—(9) Report of a committee of the New York State Science Teachers' Association (Vol. I, chap. 21, pp. 1027-1050).

Report of 1902: Text of the laws of the several States relating to temperance instruction (Vol. I, chap. 6, pp. 315-338).

where other branches are thus studied, and orally in the case of pupils unable to read, and by all pupils in all schools supported wholly or in part by public money.

SEC. 2. The text-books used for the instruction required by the preceding section for intermediate and primary pupils shall give at least one-fifth of their space to the consideration of the nature and effects of alcoholic drinks and narcotics, and the books used in the highest grade of graded schools shall contain at least 20 pages of matter relating to this subject; but when this subject is massed wholly or in part in a chapter or chapters at the end of a book, such book shall not be considered as meeting the requirements of this law.

SEC. 3. It shall be the duty of all school visitors to report to the comptroller if the provisions of this act have not been complied with, as specified in the preceding sections; and any failure thus reported, or otherwise satisfactorily proven, shall be deemed sufficient cause for withholding the amount of school dividend which such district or districts are otherwise entitled to receive.

SEC. 4. No certificates shall hereafter be granted to any person to teach in the public schools of Connecticut who has not passed a satisfactory examination in physiology and hygiene, with special reference to the effects and nature of alcoholic drinks and other narcotics upon the human system.

shall be used in grades above the fifth in all graded public schools except public high schools.

SEC. 3. The provisions of sections one and two of this act shall apply, in ungraded public schools, to classes corresponding to the grades designated in said sections.

SEC. 4. All normal schools and teachers' training schools shall give instruction in the subjects prescribed in section one of this act, and in the best methods of teaching such subjects.

SEC. 5. No certificate to teach in grades above the third shall be granted to any person who has not passed a satisfactory examination in the subjects prescribed in section one of this act.

SEC. 6. If it shall be satisfactorily proven to the comptroller that any town or district, having pupils above the third grade, has failed to meet the requirements of this act, such failure shall be deemed sufficient cause for withholding, in whole or in part, school dividends which such town or district would otherwise be entitled to receive.

STATEMENT OF THE COMMITTEE ON TEMPERANCE LEGISLATION APPOINTED BY THE CONNECTICUT COUNCIL OF EDUCATION AT ITS FEBRUARY MEETING, 1901; PRINTED AND DISTRIBUTED AT THE REQUEST OF THE COUNCIL.

To the School Superintendents, Principals, and Teachers of Connecticut:

So far as the members of this committee know, there has been little or no opposition among the school people of Connecticut to giving the children in the public schools a reasonable amount of instruction in temperance physiology. There had been, however, from the time the statute of 1893 was passed until it was repealed, increasing opposition to inflicting on the children of the State the kind and amount of instruction required by the statute.

STEPS TAKEN TO SECURE A NEW STATUTE.

The widespread opposition to some features of the law became apparent, in a measure, at a meeting of the council of education, held in New Haven, early in the present year. So pronounced did the hostility to some requirements of the statute appear that Rev. J. H. James, secretary of the Connecticut Temperance Union, suggested that the school people and temperance people should get together and see if they could not come to some agreement, and if it seemed best, ask for modifications in the law. The suggestion was acted upon, and this committee was appointed to confer with representatives of the temperance organizations of the State. Those appointed to represent the temperance people were Mrs. Cornelia B. Forbes, of Hartford, president of the Connecticut W. C. T. U.; Mrs. Anna Kerr, of Norwich; Rev. J. H. James, secretary of the Connecticut Temperance Union; Mr. E. L. C. Hohenthal, of the Sons of Temperance, and

Rev. Walter J. Shanley, of Hartford, president of the Connecticut Catholic Total Abstinence Society.

A conference was held at which nothing was accomplished, but later, by each party making concessions, a compromise was effected and a bill agreed upon and introduced as a substitute for a more radical measure that was already pending in committee. Two hearings were given by the committee on education of the legislature. The bill was supported by Principals W. I. Twitchell and W. F. Gordy, of Hartford; Mrs. Anna Pollard, superintendent of schools, Southington; Dr. E. H. Forbes, superintendent of schools, Torrington; W. H. Hall, superintendent of schools, West Hartford; Principal George H. Tracy, Portland; Rev. J. H. James, secretary of the Connecticut Temperance Union; Prof. William North Rice, of Wesleyan University; W. B. Ferguson, superintendent of schools, Middletown. Many others were present ready to support the measure. Mrs. Cornelia B. Forbes, president of the Connecticut W. C. T. U., stated that her association accepted the bill in good faith, and would be loyal to its agreement with the teachers of the State, a promise which was faithfully kept under most trying circumstances. A petition, signed by superintendents and principals representing nearly two thousand teachers and seventy thousand pupils, and urging the passage of the bill was presented, and letters from President Hadley, of Yale, and President Raymond, of Wesleyan, favoring the measure, were offered in its support. The bill was opposed by Mrs. Mary H. Hunt, national and international superintendent of the department of scientific temperance instruction of the W. C. T. U., who appeared before the committee on education, two or three clergymen of the State, and several members of the advisory committee of the National W. C. T. U., who sent a circular letter to every member of the general assembly, urging the defeat of the measure. Other means for defeating the bill were resorted to by its opponents, but it passed both house and senate without a word of opposition from any member.

THE NEW STATUTE.

The provisions of the new law are given above.

HOW THE NEW STATUTE DIFFERS FROM THE OLD ONE.

By comparing the foregoing statute with that of 1893 it will be seen that the new law differs from the old one chiefly in not prescribing instruction in temperance physiology in grades below the fourth year of school nor in the high school; in not requiring the use of text-books in grades below the sixth, and in not requiring in any grade the use of books that devote any definite amount of space to a consideration of the nature and effects of alcohol and other narcotics on the human body. The books used must, however, be "suitable" books and must explain the effects of narcotics on the human system.

ACKNOWLEDGMENTS.

In securing these changes in the law, changes made in the interests of temperance and morality, too much credit can not be given to those broad-minded temperance people of the State who showed a spirit of conciliation and an invincible loyalty to their agreement under circumstances that would have severely tested the courage and faithfulness of any except those who place duty before policy, honor before favor, and the interests of the children before the pleasure or censure of anybody.

This committee believes this to be the first instance of the school people and temperance people of any State coming together in support of a temperance educational bill. It is an evidence of the good sense of both parties.

RESPONSIBILITY OF SCHOOL OFFICIALS AND TEACHERS.

It now remains for the school officials and teachers of the State to live up to the letter and spirit of the law by endeavoring to impress on their children and youth the principles of temperance and of temperate living. Unless this responsibility is fully met we shall fail to prove true to the agreement clearly implied in our support of the bill which has become a law. We should all see to it that our fidelity to that promise is not surpassed by the loyalty which we admired so much in the temperance people.

IMPORTANCE OF PHYSIOLOGICAL KNOWLEDGE.

In proving true to our agreement we shall also be loyal to the highest interests of our pupils. It is important that all children shall become familiar, before leaving school, with at least the primary laws of health. Such knowledge is an all-essential part of a rational education. Herbert Spencer, in his epoch-making discussion of "Education—Intellectual, moral, and physical," says, in discussing the value of a knowledge of physiology, "We infer that, as vigorous health and its accompanying high spirits are larger elements of happiness than any other things whatsoever, the teaching how to maintain them is a teaching that yields in moment to no other whatever." "For complete living it is necessary not only that sudden annihilations of life shall be warded off, but also that there shall be escaped the incapacities and slow annihilation which unwise habits entail. As, without health and energy, the industrial, the parental, the social, and all other activities become more or less impossible, it is clear that this secondary kind of direct self-preservation is only less important than the primary kind, and that knowledge tending to secure it should rank very high."

Such knowledge the study of physiology and hygiene gives, and we fail to do our duty as teachers if we deny to our pupils this information which affects life so vitally. We do not assert that knowledge of the laws of health insures correct habits in every case, but we do assert most confidently that such knowledge, acquired in early life, renders evil habits less likely in any case. "As the laws of health," said Herbert Spencer, "must be recognized before they can be fully conformed to, the imparting of such knowledge must precede a more rational living, come when that may." "If fatigue of body or brain were in every case followed by desistance; if the oppression produced by a close atmosphere always led to ventilation; if there were no eating without hunger, or drinking without thirst, then would the system be but seldom out of working order." But this is far from the case, as we all know, and therefore an acquaintance with the fundamental principles of physiology and the primary laws of health is of very great importance.

TEMPERANCE.

The term temperance in its broad signification relates to the proper use of all the powers of mind, soul, and body. It is opposed to excess of every kind. In this broad sense temperance should be assiduously cultivated. No day passes without some incident happening on the way to school, in the school yard, or schoolroom that furnishes an excellent opportunity for enforcing lessons of temperance. Every cruel or unkind word, every exhibition of bad temper, of greediness, selfishness, or jealousy, of rashness or timidity, is a violation of temperance. But it is evident that in this sense temperance bears no closer relation to physiology and hygiene than to other subjects, and to none is the relation likely to be so close as it is to environment out of school.

RELATION OF NARCOTICS TO PHYSIOLOGY AND HYGIENE.

In a narrower sense, however, temperance relates to abstinence from the use of alcoholic liquors and other narcotics. In this sense, it bears a very close relation to physiology and hygiene. The term physiology relates more especially to the anatomy and functions of the various organs, while the term hygiene relates to the care of those organs, the preservation of health. Narcotics often have a serious effect upon health. It is evident, therefore, that a consideration of the effects of narcotics on the human body may properly come under the subject of hygiene.

IMPORTANCE OF THE SUBJECT.

The importance of any branch of instruction is accurately measured by the assistance it can give toward complete living. Measured by this standard, instruction concerning the effects of alcohol and other narcotics on the human system is very important. By their deteriorating and destructive effects on the bodily organs, often causing disease and shortening life; by their indirect effects on mind and morals, often undermining both and causing crime and unhappiness, narcotics are a curse to the human race. Their effects are felt to some extent by the innocent as well as the guilty. But unless warned against the terrible evils that often follow their use, the innocent of to-day may become the guilty of to-morrow. Teachers should, therefore, warn and endeavor to fortify their children and youth against the temptations and dangers to which they may be exposed.

INSTRUCTION IN PRIMARY GRADES.

The law does not require the teaching of physiology and hygiene in primary grades, but courses in nature study and elementary science will generally include more or less of such instruction. Teachers of these grades should give their pupils any needed warning against evil habits, especially against the smoking of cigarettes.

GENERAL SUGGESTIONS.

1. This committee recommend that the principal topics under physiology and hygiene be taught at least twice during the course, once orally or with books as may be preferred, and once with text-books. Of course the teaching should be more exhaustive and critical in the higher grades.

While the statute does not specify that text-books shall be used by pupils, it is strongly recommended that all pupils above the fifth grade make a thorough study of at least one text-book of physiology.

2. While it is assumed that by far the greater part of the time will be devoted to other topics of physiology and hygiene, the temperance lessons should not be slighted. They should be carefully planned and impressively taught. Unless the teacher feels a deep interest in the subject, and in saving the boys and girls from lives of unhappiness and possible crime, the instruction will have little effect. Perfunctory teaching of this subject is likely to be valueless or positively harmful.

3. Narcotics should be taught chiefly in connection with dietetics and the nervous system.

4. In teaching the dangers attending the use of alcoholic liquors, emphasis should be placed upon the power alcohol has of creating an increasing appetite for itself, until, perhaps, the victim has lost all self-control and become a slave to an appetite "stronger than love for parents, wife, or children; stronger than

desire of respect or dread of poverty or ridicule; an appetite terrible in its torments and never to be satisfied in its demands." Show the children how temptations often arise, and endeavor to fortify their wills against them by creating a desire to lead lives of respectability and usefulness, more than by attempting to frighten them.

5. State the facts plainly and impressively, but guard against exaggeration. Truth is mightier than falsehood. "A serious mistake is made when the suspicion is aroused that an effort is made to establish a case rather than to ascertain the truth."

6. Select illustrations that do not grate too harshly on the sensitive natures of children.

SOME THINGS TO TEACH.

The following topics are not intended to be exhaustive, and yet they suggest the points which should be most strongly emphasized in teaching temperance.

Pupils should be taught:

1. The source of alcohol.
2. The two classes of alcoholic liquors: (*a*) Fermented—cider, wines, beer, ale; (*b*) Distilled—brandy, whisky, gin, rum.
3. That alcohol is a harmful drink, because often (*a*) it injures the body; (*b*) it injures the mind; (*c*) it injures the morals; (*d*) it decreases one's chances of succeeding in life; (*e*) through its power of creating an increasing appetite for itself it causes intemperance, with all the frightful results that follow.

It is not to be understood or taught that alcohol in all quantities and in all cases produces all or any of the foregoing effects, but that it has a tendency to produce them and will always succeed, if sufficient quantities are taken, and if other conditions are sufficiently favorable.

4. In connection with the nervous system teach (*a*) that alcohol in sufficient quantities temporarily paralyzes the nerves that control the voluntary muscles and thus causes drunkenness; (*b*) that in sufficiently large quantities it temporarily paralyzes the brain, causing unconsciousness and sometimes death; (*c*) that it is a potent cause of hereditary defects.

The teacher and pupils should trace the results of these primary effects, such as the loss of employment, health, self-respect and the respect of others, unhappiness, poverty, and death.

5. Teach that the use of tobacco (*a*) may retard the growth of the young body and decrease its strength; (*b*) sometimes makes the young intellectually lazy, weak, and dull; (*c*) often has a harmful effect on the nervous system, sometimes producing serious disorders; (*d*) may interfere with digestion; (*e*) creates a strong appetite for itself and often makes a man a slave to it—many try to leave off its use, but only a few succeed; (*f*) frequently leads its user into the company of those who are addicted to the use of alcoholic liquors and thus subjects him to dangerous temptations; (*g*) its use involves great expense without any valuable return; (*h*) tobacco chewing is a filthy habit, and smoking is offensive to many; (*i*) many business men will not employ boys who are cigarette smokers.

6. Teach briefly the danger of using opium, morphine, chloral, and cocaine.

7. Teach the importance of practicing temperance in all things.

8. By means of biography, the testimony of local physicians, employers of labor, prominent men of the town, and those holding exalted positions, impress upon the children the fact that temperance brings that strength of body, clearness of mind, self-control, respect, and confidence of others which are necessary to success in life.

SOME THINGS NOT TO TEACH.

1. There are questions connected with the food value of alcohol and with alcohol considered as a poison which have not yet been answered to the entire satisfaction of leading scientists, and the public school-teacher will do well to omit all discussion of them. There is enough that is known about alcohol to condemn its use as a beverage.

2. Do not teach that an appetite for alcohol or tobacco is commonly inherited. If such cases exist they are very rare. Certain physical weaknesses which have been caused by the use of narcotics may doubtless be inherited, and such weaknesses may render their possessor more susceptible to the alcohol or tobacco habit. Teach this.

3. Do not teach that tobacco creates an appetite for alcohol, but that one bad habit often leads to another, and, therefore, the user of tobacco is more likely to become a user of alcoholic liquors.

ILLUSTRATIVE EXPERIMENTS.

Guard against using illustrative experiments which convey wrong impressions. For instance, because pure alcohol will harden many animal and vegetable substances placed in it by extracting water from them, it does not follow that all alcoholic liquors, as usually taken, have so great an effect on those substances in the stomach. When such liquors are drunk, the stomach pours out an abundance of gastric juice to further dilute the alcohol, and thus greatly lessens the power of the alcohol to retard digestion. Alcoholic liquors tend to cause a waste of gastric juice and to weaken the stomach.

CHARTS AND BOOKS.

Pictorial illustrations appeal strongly to children. Facts which make little or no impression when stated in words often produce a lasting impression when represented to the eye by means of a striking picture.

1. Charts which show the comparative cost of liquors and the food or schools of the country are suggestive. Charts which show the effects of alcohol on the stomach should be used with caution, especially those charts that are repulsive to sensitive children.

2. *Books.*—We know of no physiologies published in this country for primary or grammar grades that are satisfactory. Some books give an undue proportion of space to temperance matters, and some have not been revised and brought up to date. Under the circumstances, therefore, and until satisfactory books are published, care should be taken to correct or omit all misleading statements in the books used, but in making corrections great care should be taken not to convey the impression that an argument is being made in favor of even the moderate or occasional use of narcotics. It is hoped that books which are scientifically accurate and at the same time strong but reasonably brief in their temperance features will soon be published.

CONCLUSION.

While this committee can not indorse the view that in teaching physiology and hygiene "temperance should be the chief topic," while they believe that temperance should be presented as only one of many topics under the subject of hygiene, and that much the greater part of the time should be given to other matters, they are unanimous in the belief that all the children should be thoroughly instructed in the evil effects of narcotics on the human body and

character as well as on society and the state. They earnestly hope, therefore, that all teachers in Connecticut will give to this subject the attention which its importance demands.

W. B. FERGUSON,
F. H. BEEDE,
W. I. TWITCHELL,
F. A. VERPLANCK,
Committee.

REPORT OF THE NEW YORK STATE CENTRAL COMMITTEE AS TO THE RESULTS OF THE STUDY OF PHYSIOLOGY AND HYGIENE, BEING A REPLY TO THE STATE SCIENCE TEACHERS' ASSOCIATION.

NEW YORK STATE CENTRAL COMMITTEE ON SCIENTIFIC TEMPERANCE INSTRUCTION IN PUBLIC SCHOOLS.

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First vice-chairman, Rev. J. H. Darlington, Ph. D.
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Epworth League :

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Rev. James B. Dunn, D. D.

Woman's Christian Temperance Union :

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Mrs. Emma F. Pettingill.

Mrs. Ellen L. Tenney, treasurer, New York State.

Mrs. Ida G. Van Valkenburg, State superintendent scientific temperance.

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Carlos Martyn, D. D., Litt. D.

James Talcott.

Hon. William T. Wardwell.

Inasmuch as certain strictures on the present system of teaching physiology and hygiene in the schools of this State were made by the committee on stimulants and narcotics of the New York State Science Teachers' Association at its last annual meeting (December 28, 1901), attention is called to the following statement of facts:

In 1895 the temperance committees of the various churches and representatives of other philanthropic organizations in New York State united with the State Woman's Christian Temperance Union under the name of the New York State Central Committee for Scientific Temperance Instruction, the object being to secure the present law requiring the study by all pupils in the public schools of physiology and hygiene, including the nature and effects of alcoholic drinks and other narcotics.

It is the settled policy not of New York alone, but of this entire country, to require by law the study in question for all pupils in all public schools. Although the laws requiring it have not been long enough in force to show their utmost results, the beneficent effects of this study are already manifest:

First. In increased popular knowledge and practice of sanitary laws which are admitted to be contributing causes to the gain of four and one-tenth years in the average length of life in this country reported by the last census.

Second. In the demand of employers for abstinence in employees, following closely as it has upon the teaching in the schools that alcohol injures working ability.

Third. In the consequent greater sobriety of the American workman, which is acknowledged to be one factor in the commercial success of the United States.

The New York central committee, which never disbanded, has now reorganized to protect the instruction which it secured in its own State. In pursuance of this purpose the committee presents the following reply to the Science Teachers' Association:

* * * * *

NO LIMIT OF SAFETY IN THE USE OF ALCOHOLIC DRINKS.

The report of the State Science Teachers' Association, after admitting that it does not undertake to prescribe the limit of safety (in the use of alcoholic drinks) for the average adult, says later that "spirits should never be used as beverages unless largely diluted, and that alcohol in any form should be taken only at meals and after the work of the day is done," and that "youths under 21 should abstain altogether," as though after that period they might use alcoholic drinks with safety. They urge the importance of self-control, adding that "the world belongs to those who can control themselves, but the man who uses alcohol in excess can never do this."

This whole section is a specious plea for moderate drinking, with the qualification that youths should abstain before they are 21. Such an argument is dangerous, fallacious, and not sustained by science or experience.

Concerning the effects of alcohol on children and youth, Dr. G. Bunge, professor of physiological chemistry in the University of Basel, Switzerland, says in a recent article: "I have never yet heard any valid reason for this opinion that alcohol is less injurious to adults than to children. * * * If one would answer the question on the grounds of experience, he must compare the effects of proportionate doses upon the organism of the child and that of the adult. If, for example, a child weighing 20 kilograms received a quarter of a liter of wine daily and a man weighing 80 kilograms receives 1 liter, I do not know whether the man would bear the wine any better than the child or not."

In its discussion of this phase of the alcohol question, the State Science Teach-

ers' Association seems to forget the fact that alcohol, like opium, morphine, and other narcotics, when taken with any continuity, even in moderate amounts, has the power to create the uncontrollable and destructive appetite for more. This power is not lost when it is taken "diluted" as in beer, wine, and cider, in "diluted" whisky, "with meals" or "after the day's work is done," or whether under or over 21. No one can tell how long he may be able to resist the power of alcohol to make him its slave. It is this power which makes it futile to attempt to teach self-control in the use of a substance whose nature it is to destroy self-control. It is this inherent quality to create the alcoholic appetite which furnishes the scientific basis for total abstinence and leaves no justification for calling the moderate use of alcohol "strict temperance." Because of this power the "difference to be emphasized" between moderate and excessive use, for which the Science Teachers' Association contends, should be that the moderate use leads to "excessive" use, and "excessive" use leads to destruction. Therefore, whoever begins the moderate use lessens his chances of securing that portion of the world "which belongs to those who can best control themselves."

Such physiological investigators as Professors Bunge, of the University of Basel; Meyer, of Gottenberg; and Frick, of Zurich, testify to the same truth as that expressed by John Madden, M. D., of Wisconsin, who says:

So subtle are the processes of the narcotics, of which alcohol is one, in creating a need on the part of the nervous system for a repetition of the same drug, that the habitué becomes such before he is aware; and his chance to regain his former mental and physical condition, other things being equal, is in exact ratio to the amount of damage he has sustained from alcoholic poisoning.

As to taking alcohol with meals, Prof. Victor Horsley, of the University of London, says:

From a scientific standpoint the claim so often put before us that small quantities of alcohol, such as people take at meals, have practically no deleterious effect, can not be maintained.

The idea that there is safety in taking it "after the day's work is done" is a delusion, for Professor Kraepelin, of Heidelberg University, Germany, has shown by actual demonstration that—

Alcohol causes a diminution of brain power which lasts sometimes until evening of the second day.

Hence, for the person who is unwilling to surrender any portion of his intellectual ability to this substance or to run the risk of becoming its slave, abstinence is the only safety, whether he is under 21 or over, or whether alcohol be taken with or without meals.

METHODS OF INVESTIGATION COMPARED.

The report of the State Science Teachers' Association criticises our temperance physiology law as though it demands merely instruction concerning alcoholic drinks and other narcotics, ignoring its requirements in general hygiene. The fact is that only one-fifth of the space in the text-books for primary and grammar grades and but 20 pages in high school books need be given to the subject of alcohol and narcotics. All the rest is physiology and hygiene.

The investigation conducted by the committee from the State Science Teachers' Association was threefold in character—

First. An effort to secure the opinion of supervising teachers of the State on the status of this subject in the schools.

Second. An inquiry of physiology classes in two normal schools to ascertain

their attitude toward this subject, and what they had gained from previous study.

Third. A list of questions to college and medical school professors and members of the committee of fifty, high school physiology teachers in the cities and towns of New York and New England, to ascertain their opinion of the law and what should be taught under it.

1. It is a noteworthy fact that in the effort to secure the opinions of the teachers of the State the Science Teachers' Association was obliged to admit that the grammar school men, who come most closely in contact with the children, favored physiology throughout the whole course to a greater degree than other groups, while in all the groups there were teachers favoring the present provisions of the law.

2. The inquiry in normal school classes has little practical bearing on the subject, because young people are seldom able to decide intelligently what studies are necessary to an all-round development nor what are the formative influences which have shaped their own habits and character. No one would consider that the interest in mathematics, or their lack of it, on the part of normal school students should have any weight in deciding whether mathematics should be pursued either in the normal or public graded schools. Why, then, is this subject? If, however, it was the expectation of the committee to prove by such investigation that normal pupils felt they had been getting too much physiology through the grades, the facts elicited proved exactly the contrary. None of the pupils questioned considered that such had been the case, but on the contrary nearly one-fifth of those questioned felt that they wanted more of the subject.

3. As to the third line of investigation of the State Science Teachers' Association, the question may justly be raised why the Science Teachers' Association felt it necessary to consult college and medical school professors and high school teachers in New England as to the practical working of this law in the public schools of New York.

The New York State central committee, on the contrary, has sought for specific information concerning the results of the study of this whole subject from those best qualified to judge of its effects upon the children of this State, namely, their parents and the patrons of the schools.

Some parents receiving our questions sought additional information from teachers. Thus much testimony has been obtained incidentally from those engaged in the actual work of instruction through the various grades. Responses to our inquiries have been received from 361 different sections, including leading towns and cities, representing every county in the State.

RESULTS OF TEACHING GENERAL HYGIENE.

In response to the questions:

Do the children in your public schools report at home facts of general hygiene learned at school? and

Is the teaching influencing the hygienic habits of children?

parents testify that as a result of this study the children do practice and bring home the truths thus learned. They insist upon proper ventilation of sleeping and living rooms, and tell how to get it. They comment on the danger of drains or pools of stagnant water in cellars, dooryards, or near wells, and urge the necessity of using pure water. The importance of eating slowly and at regular intervals, the proper selection and cooking of food, its adaptation to season, suitable dress, the harmfulness of corsets, the danger of drafts, are facts learned at school and put to practical use by the children. They ask for tooth-brushes and individual towels, and object to public drinking cups. They become

little rebels against dirt and disorder in the home, and help to secure better conditions; are more careful of the eyesight; assume better positions in standing, walking, and studying. Teachers comment on the improvement in personal appearance resulting from this study. Mothers say, "Take any other study out of the schools, but leave this." Their testimony in this respect is almost uniform.

One mother says: "I have been surprised and delighted for years with the information the children in my large family have gained in hygiene as well as in temperance in the schools. The work is thorough and real and is influencing the homes." (Cattaraugus County.)

"I have six children taught in the public schools who have all profited by their instruction in physiology and hygiene. Even if the temperance part were left out, the rest would be absolutely essential. With the temperance instruction it becomes the most important study pursued in the common schools." (Columbia County.)

"This teaching is helping some children to observe certain laws of health which their parents do not know about and can not teach them." (Sullivan County.)

"You have no idea what a help this study is to me." This mother had been reading her children's physiologies. (Erie County.)

"I am the mother of six children and am truly in favor of the study as taught in our schools, and know that every parent is, as it does much good. I would not have it taken out for anything." (Chautauqua County.)

No one who looks over the voluminous testimony from all parts of the State on this phase of the study, of which the foregoing is but a mere sample, can fail to see that, contrary to the opinion of the Science Teachers' Association, there is a growth of widespread intelligent practice of general hygiene resulting from this study and that the statute requiring it is "accomplishing what it was destined to accomplish."

RESULTS OF TEMPERANCE TEACHING.

The New York State central committee in its inquiries asked how this teaching is influencing the children regarding the use of alcoholic drinks and tobacco, and if they persuade others to give up such use. The replies show that the instruction is strengthening the children to resist temptation to use these substances, and is helping them and their parents to abandon such use when already begun. It appeals to their self-respect in causing abhorrence of the idea of ever becoming victims of alcoholic or narcotic habits, and also to their desire to "get on in the world," as they learn that alcohol and tobacco by impairing mental and physical ability, limit the chances of success in life. The following are extracts from some of the replies received by the State central committee:

INFLUENCE OF THE TEACHING ON PUPILS.

"It is influencing the children against alcoholic drinks by showing them the danger of beginning to use any of them." (Dutchess County.)

"Mrs. B. says that her boy, when he sees a man smoking, says, 'I don't believe he studied physiology.' Several have given up smoking, some because of their own study about the effects of tobacco, some because the girls in the class refused to have anything to do with them if they smoked." (Suffolk County.)

"Not so many boys are trying to learn to smoke and drink as formerly." (Essex County.)

"In the case of my child the instruction is very weighty against alcoholic drinks." (Delaware County.)

"It influences the children as to the effects of alcoholic drinks so that they refrain from using them." (Seneca County.)

"A boy whose father smokes said he 'had intended to smoke when he was a little older, but if tobacco was so injurious he guessed he would let it alone.'" (Suffolk County.)

"I overheard several boys talking the other day, and one boy said, 'I want to be a big man who knows something, and if we smoke we won't grow so well, and smoking makes the brain dull. Our teacher said so.'" (Orleans County.)

"Some of the boys who had already formed the cigarette habit have given it up as a result of the teaching." (Chenango County.)

"The children try to help each other give up habits of drinking and smoking." (St. Lawrence County.)

"It is influencing the children very decidedly against tobacco." (Livingston County.)

"So far as known, only two boys in our schools use tobacco. Registration during the year, 812." (Nassau County.)

"It helps keep the children from forming the tobacco habit." (Chemung County.)

"One high school teacher has told me she certainly thinks this instruction is influencing the children, for there are not so many of the boys who have graduated in the last five years who drink as before that time." (Putnam County.)

"This teaching appeals to the law of self-preservation inherent in every child." (From a teacher, Herkimer County.)

"The children tell with great delight what they have learned, and resolve to keep the body free from intoxicants." (Fulton County.)

"I asked the teachers whether in their opinion the children are stronger against alcohol and tobacco than they would have been if they had not had the teaching, and they all say 'Yes' very decidedly. I have also had much testimony from parents to the same effect." (Franklin County.)

"The teaching is influencing the attitude and habits of children in some cases, if not in all, against alcoholic drinks and tobacco." (Broome County.)

"I am almost if not quite an enthusiast in this line of work, and the children with whom I have worked have always seemed to be deeply interested. During my period of teaching, which covers several years (ten or more), only two parents, mothers, have objected to their children receiving such instruction. These mothers were ignorant and representatives of the lowest of the social classes. Parents, if they do not uphold, at least tolerate the teaching, but it is my belief that thoughtful, intelligent parents do believe in it thoroughly. I am expecting much of the mothers of the next generation who are little girls of to-day." (Madison County.)

"The children are known to refuse fruit, cake, and candies in which alcohol is used." (Onondaga County.)

"The boys do not now consider it smart to smoke. There is not to my knowledge a single boy under 16 in the village who smokes." (Columbia County.)

"A little boy refused a pudding of which he was very fond because his mother served it with wine sauce." (Greene County.)

"I have heard my own daughter, 12 years old, as a result of her instruction, teach her younger brother never to use tobacco or intoxicating liquors, and have heard him declare that he never would." (Schenectady County.)

"One of our saloon keeper's sons, 15 years of age, has said to his father that he 'had better stop selling liquor and go to work like other people.' The son can not be induced to sell it or have anything to do with it, a result of the teaching in our public schools, and his father has told him that he must leave home on that account, but it makes no difference with the boy." (Jefferson County.)

"The formation of the tobacco habit is prevented until children have arrived at an age when they will never form it." (Westchester County.)

"Some cigarette smokers have given up the use of cigarettes." (Warren County.)

"It is creating an aversion to the tobacco habit." (Washington County.)

"The streets and walks do not show so many empty cigarette cases as they used to; in fact, I seldom come across one now, while scores of them were seen a few years ago. Children are not often seen with them now." (Cortland County.)

"During a period of extremely cold weather last winter, D. S. took his 15-year-old son with him into a box car to care for a horse which was being shipped to New York City, and his mother, thinking they would suffer from the cold, wished them to take some whisky with them, but the son positively refused, giving facts concerning the erroneous impression that liquor ever did help one to withstand the cold." (Otsego County.)

AN AID IN RESISTING TEMPTATION AND AN APPEAL TO THE DESIRE FOR FUTURE SUCCESS.

Cases are given where as a result of this instruction the habit of cider drinking is noticeably on the decline.

"In one locality where it is plentiful none of the children in the school will touch cider." (Wyoming County.)

"In some instances pupils will not even touch sweet cider which they had learned to drink in their homes." (Ontario County.)

"The habit of cider drinking is being largely done away with." (Schoharie County.)

"It is causing many children to give up drinking cider." (Clinton County.)

"One of my pupils, a boy about 14 years of age, son of a former Congressman, who is a liquor dealer, was dining with a classmate. When offered a glass of cider he inquired if it had alcohol in it, saying that he would not be willing to drink it if it had." (Albany County.)

"Whisky sellers have tried to hire three or four schoolboys to drink, offering them money, but they steadily refused." (Monroe County.)

"Although we have a saloon in our town, it has not got one of our boys for some years past, and every method has been resorted to to tempt them." (Saratoga County.)

"It makes the children careful about taking a 'treat' from those whom they sometimes meet." (Cayuga County.)

"One little boy was so strong and persistent in refusing wine (in this grape section) that now they do not pass it to him or ask him to take it. He said he wanted to be a good man to help his mother (a widow). He will not touch a cigarette or a bit of tobacco." (Chautauqua County.)

"Mrs. P. took her son of 12 years to dine with an uncle. The boy's glass was filled with ale, but he declined it. On being pressed, he said he did not want it. His mother finally commanded him to drink the ale, and the uncle, lately from England, observed that American boys appeared to be brought up to disregard their parents' wishes. His mother insisted on obedience, and the boy finally said: 'Why, if I once begin to drink ale I may want more and more, and go on and drink so that I shall not be able to help my mother when I grow up.' Needless to say he was urged no more." (New York County.)

"A young girl graduate of the public schools spent a few weeks in a family that used liquors and wines in cooking and sometimes in social drinking. This harmonized with her early home habits, but her physiological school studies had changed all that, and she abstained quietly but strictly. Being questioned after she returned home, she said she felt it a privilege and an honor to call herself a total abstainer and to acknowledge herself indebted to her scientific temperance instruction." (New York County.)

"Two well-grown lads who went to the Middle West after they left school wrote home enthusiastically, saying that they found it easier to obtain employment because they could give assurance that they were total abstainers." (New York County.)

INFLUENCE ON PARENTS.

"A German boy of 7 declined to drink his mug of beer at lunch, and his father inquired the reason. 'Because my teacher says it is bad for me, and she has a book that tells about it.' 'You get dot book for me; I want to read it.' The book was produced and read by both parents, and beer was banished from that household.' (New York County.)

"A visitor among the city poor found a German mother whose children had learned so much about beer at school that they would not drink it. After this had gone on for some time the father said: 'If our children will not drink beer, then we will not have it on the table,' and from that time it was banished." (New York County.)

"It opens the eyes of parents, especially of those who use liquors, to the evil and menace to their health." (Richmond County.)

"Parents who were not privileged to attend school and receive such instruction learn of the evil effects of alcohol and tobacco from their children as it is now taught them." (Oswego County.)

"A boy 8 years of age convinced his father of the evil effects of tobacco and persuaded him to discontinue its use. A little girl influenced her brother to stop cigarette smoking." (Wayne County.)

"V. D. said that since he had learned about the effects of alcoholic drinks his father had stopped drinking and had not drunk now for four years." (Suffolk County.)

"I asked a family of four children what they had learned at school of this subject. The father said, 'I wish I had known and been taught what my four children have, and I should not have been such a slave to these bad habits (of the saloon).' C. said, 'Well, Pa, you don't get drunk any more, you know.'" (Schuyler County.)

"It is making the youth more intelligent and indirectly affecting parents and friends." (Oneida County.)

"I know of four families who have been saved from drunkenness through the influence of the teachings received in school." (Kings County.)

"A child tried to get his father to stop smoking." (Tioga County.)

"A little girl became so interested in the study of the evils resulting from alcoholism that night after night she faithfully related to her intemperate father the information she had gained in school. Early one morning one of the clergymen was aroused by the door bell. He found the father and the little girl at the door, both asking to sign the pledge. The father for a number of years has been a sober, Christian citizen." (Queens County.)

INFLUENCE ON THE COMMUNITY.

Another question asked by the New York central committee was, "What good is this study doing in your community?" The following are samples of the replies:

"Our children do not seem to think it manly to drink and use tobacco, as formerly, although, of course, there are exceptions. This has become a strong temperance town. We have had no saloon for about five years." (Rensselaer County.)

"Our boys understand more about the evil effects of moderate and occasional indulgence in smoking and drinking, and eventually we shall have a generation of parents who will find it harder to sin against light and knowledge than those who, being ignorant, have accustomed themselves to beer and tobacco." (Ulster County.)

"There is a silent influence, the forming of public opinion, that will tell on the side of temperance when our children are men and women; also a gradual influencing of parents and the community." (Montgomery County.)

"I fully believe the good will appear when the children take their fathers' places in the home and society and in performing the duties of citizenship." (Orange County.)

"The parents are being reached for health and temperance through the children as they could not be in any other way." (Tompkins County.)

"It is creating a wide-awake youth who will not walk blindly into the traps of alcoholism and narcotics." (Onondaga County.)

"It is giving the children such instruction as will tend to make them useful and intelligent citizens in the future. We all hope this law may not be repealed." (Niagara County.)

"It is gradually opening people's eyes and building in the character and habits of the children a solid foundation of temperance truth which will grow stronger, wider, and deeper as the years go on." (Monroe County.)

"It is slowly but surely awakening the people to the great danger to which their sons and daughters are exposed by licensing this great evil." (Yates County.)

"It has helped to create a temperance sentiment and is making the business disreputable." (Cattaraugus County.)

"It is doing much in the way of better living, especially in regard to pure air, good food, and cleanliness, and to the use of cigarettes by young boys." (Dutchess County.)

"It is training the children to an understanding of the evil effects of alcohol. This knowledge is becoming a part of themselves, which can but have the result of keeping at least a majority of them from using alcohol. If this were not so, the people friendly to the use of strong drink would not trouble their heads about the comparatively short time that is taken for this study." (Erie County.)

"It has raised the moral tone of the place." (Genesee County.)

"It is making narcotics something to be feared and the selling of beverage liquors despised." (Steuben County.)

"The children in our town look upon the liquor business as something not respectable. Thirty years ago some of the best families were in the business; now they are not, and do not consider it a respectable trade." (Rockland County.)

"The proprietor of one of our largest department stores said he thought this one of the grandest movements that could have been taken up." (Kings County.)

"There is a better temperance sentiment among the boys of our village than ten years ago. Many influences have helped to secure it, but this counts one." (Lewis County.)

"It is teaching boys and girls correct ways of living, especially those who have no good home training." (Orleans County.)

"It gives a healthful uplift to the community where it is taught." (Saratoga County.)

"It receives the most profound respect and approval from all quarters. I have never heard the least disapproval from anyone, but righteous indignation from several readers of 'The Outlook' at the antagonistic position of its editorials. A short time ago one old subscriber of twenty-five years' standing stopped her paper in consequence, giving reasons." (Schuyler County.)

"It is helping fathers and mothers to bring up their children fortified against the temptation to drink." (Suffolk County.)

In answer to our question concerning the effects of this study, the principal of a high school (Allegheny County) wrote:

"A waste of time; dislike of the subject from repetition; sometimes gives false ideas of things."

Evidently the people of this community differ from the high school principal, for on the same sheet was written the following:

"As a parent and as a pastor, I am enabled to affirm that scientific teaching of the physiological effects of alcoholic drinks is approved by myself and the members of my congregation.

"(Signed.)

(Name), Pastor of Baptist Church."

"I most cordially and heartily indorse the above statement of the Rev. ——— for myself and in behalf of my own congregation.

"(Signed.)

(Name), Pastor of the Presbyterian Church."

"I hereby certify that at a union meeting of the congregations of the Presbyterian, Baptist, and Methodist churches, held in the Methodist Episcopal Church, those present voted unanimously against any repeal of the New York temperance-education law.

"(Signed.)

(Name), Pastor of the Methodist Episcopal Church."

REPLY TO CONCLUSIONS OF SCIENCE TEACHERS' ASSOCIATION.

The examples quoted constitute but a mere fraction of the testimony received by this committee from those best qualified to judge, namely, the parents, showing that this instruction, contrary to the opinion of the Science Teachers' Association, is producing marked results for total abstinence in the lives and homes of our young people, and that the teaching of physiology and hygiene not only "ought to be" but is of "great help in the everyday life of the pupil." These results are destined to increase the number and influence as the years go by and methods of teaching are perfected.

Even if nothing more has been accomplished than is told in the reports in the hands of the undersigned committee, which we believe give but a faint idea of the good actually being done throughout the State, the people of New York would have abundant reason for gratitude to the law-abiding teachers in our public schools for the faithful, not "perfunctory," work most of them have done in teaching this branch, in spite of opposition and hindrances encountered where they should have had help.

THE TIME REQUIRED IS NOT EXCESSIVE.

In answer to the question of the Science Teachers' Association, "Do you regard as excessive the time now required by law for the study of physiology?" we emphatically replied, No. The law of New York requires not more than thirty lessons in each school year (twenty only in each of the three primary years) in the whole subject-matter of physiology and hygiene, including the temperance matter. The law does not specify the length of lessons. One hundred and sixty or more lessons are ordinarily given in geography during the year. It is certainly more important for the child to learn how to take care of his body than to be able to name every geographical feature of the earth; yet fully five times as many lessons are given each year in geography as in physiology. Hence it is evident that the requirements for the latter, so far from being "excessive," are extremely reasonable.

NO "WEARISOME REPETITION REQUIRED BY LAW."

The object of the study is to influence the children's habits, of which new ones are forming every year. To do this the study must run through the habit-forming years, and, like other progressive branches, be graded to the child's growing comprehension. Hence, so far from requiring a "wearisome repetition," as the Science Teachers' Association claims, the law definitely specifies that the subject shall be graded to the capacities of primary, fourth year, intermediate, grammar, and high school pupils. Neglect of this provision has, in some cases, led to the use of books not adapted to grade in successive years, instead of having fresh matter each year, as the law provides. To use a primary arithmetic in grammar grades, or to put an advanced arithmetic into the lower grades and continue its use for the entire course, would be an absurdity. Yet in some instances something like this has been done in physiology. A high school teacher in this State recently said with much emphasis: "When I hear the complaint that high school pupils show a lack of interest in physiology because they have had it in previous years, I always say it is the fault of the teacher and of the selection of books which do not represent the larger development of the subject which these pupils are able to grasp."

A school principal objects to the law because he says "it requires the use of the same book year after year." His difficulty is due to his lack of knowledge of what the law really requires. Experience and a wider knowledge of the needs of the study and of the fact that there is a large variety of books adapted to all grades will in due time remedy this condition.

REPLY TO RECOMMENDATIONS OF THE SCIENCE TEACHERS' ASSOCIATION.

The Science Teachers' Association recommends:

First. "That the present law be modified in such a way that teachers of physiology be given more freedom to decide as to the character and content of their teaching."

If by "character" of teaching, the association means the method, neither the New York law nor any other law specifies the method by which this instruction shall be imparted. It leaves methods wholly to the judgment and pedagogical skill of the teacher. The law merely prescribes that there shall be an oral lesson book to aid primary teachers in giving instruction; that pupils beginning with the fourth year shall have text-books adapted to grade as one source of information, and that tests in this subject, as in others, shall be necessary for promotion. Providing a text-book as one source of information for a pupil's use on any subject is not prescribing the method or "character of the teaching" any more than requiring that a pupil shall have a dictionary

prescribes the method of teaching spelling. Neither does the law specify what shall be taught about alcohol or about any feature of general hygiene. Therefore, the clamor of the Science Teachers' Association for "more freedom to decide as to the character and content of their teaching" is uncalled for.

Second. The Science Teachers' Association would have the law so modified as to allow more freedom to writers of text-books, both as to space devoted to the subject and its location in the volume. This refers, presumably, to the amount and arrangement of the temperance matter.

Authors now have freedom in arrangement of temperance matter, the only specification of the law being that the effects of alcoholic drinks and other narcotics shall be treated where they logically belong, with other hygiene. The effect of bad air and other unhygienic conditions upon the various organs of the body are always treated in connection with the description of those organs and their functions. This is the only sensible method in dealing with the effects of alcohol and other narcotics. To put such discussion in a separate chapter, out of connection with its relative physiology, is neither good logic nor good pedagogy. The present legislation has prevented this illogical method. Before the people will consent to changing the law which provides that an adequate amount of temperance matter shall be in the text-books it must be proved that the subject of the nature of alcohol and narcotics can be adequately treated in less space than is now required. Whoever computes the amount of physiology and general hygiene adapted to each grade and the proportion required for clear statement of the nature and effects of alcoholic drinks and other narcotics necessary to meet the needs of these grades will find that one-fifth of the matter in books for lower grades and 20 pages in high school books is the minimum that will cover this important subject. This, as we have shown before, if well graded, is not a repetition but a development by the addition of new facts from year to year.

NEW YORK DOES NOT WANT THE CONNECTICUT TEMPERANCE EDUCATION LAW.

Third. The Science Teachers' Association suggests the present Connecticut temperance education law as a possible example for New York.

The provisions of the Connecticut law show, without waiting to see how it works, its utter undesirability. In its description of what shall be taught in section 1 it makes no requirement for the study of physiology—merely that of hygiene and the effects of stimulants and narcotics. Hygiene with physiology appeals to the reason of the pupil; without physiology it consists of mere dogmatic rules, the "you should" or "you shouldn't" method. This is inconsistent with modern ideas of child training. The Connecticut law requires no instruction as to the nature of alcoholic drinks, that is, their inherent characteristics. It does not require the study in the high school and has practically no penalty to secure its enforcement, the penalty being left entirely to the discretion of the comptroller. It makes no definite requirement for the essential helps of text-books for pupils' use in this subject at any time in the course, not even for teachers, until the sixth year. When it has been proven to the satisfaction of this State that text-books for pupils' use are unnecessary in other subjects, perhaps such a recommendation for this branch may then be considered, but not till then.

The Connecticut law requires no instruction in this subject in the primary grades. The effect of that is obvious, for the report of the Connecticut State Board of Education for 1900 shows that, in spite of the compulsory-education law, 15 per cent of the children of that State drop out of school before the end of the third primary year. Hence, for this 15 per cent of all the children of the State, who are ordinarily from classes who most of all need this instruction,

the law makes no provision whatever. Connecticut's report on education for 1901 shows that 85 per cent of the children in the public schools of that State do not complete the sixth year, which is the first year for which that law specifies the use of books on this subject even for teachers' use, while the same report shows the need of the added help of books for pupils because of the admitted lack of preparation of teachers in all branches. Thus no adequate provision is made by this Connecticut law for the education of 85 per cent, the overwhelming majority, of the future men and women of that State in this subject, which is essential to health, life, and good citizenship.

The school attendance in New York may vary from that of Connecticut, but the fact remains that a large class of our population does not go to school beyond the lower grades. Whatever we would teach them must be taught in those grades. This class is daily being increased by the children of the enormous number of immigrants coming to our State from the Old World. These foreign-born children ordinarily stay in our public schools only long enough to learn our language, to read and write enough to become bread winners. Under our present system of physiological instruction these and all other children are taught in the lower grades such elementary facts of hygiene as they can comprehend, including those relating to alcoholic drinks and other narcotics, which will help make them good American citizens, or to go on further in this progressive study, if they stay in school through the grades. To take this study away from these grades would be to exclude it entirely from a large class of our future citizens and be suicidal to the best interests of this the most populous State in the nation. To imagine that the people of New York would do such a thing is to imagine the impossible, namely, that they have lost their interest in the future well-being of their children and of their State soon to be governed by them. Whoever contrasts the New York law with the Connecticut law can not fail to see the immense superiority of the former.

TEXT-BOOKS ABSOLUTELY ESSENTIAL FOR PUPILS' USE.

Fourth. The same arguments which have put text-books in other subjects in the hands of children old enough to use them intelligently apply to this study as well. Without some use of books in the grammar grades too much work is thrown on the teacher and too little responsibility on the pupil. The child does not go to school to have knowledge poured into him, but to gain mental power, and this in no small degree comes from the use of books in physiology as in arithmetic or geography.

Experience has shown that, owing to the lack of preparation of teachers, where text-books are not required for pupils' use in this branch, as soon as they are able to glean information from the printed page the study is apt to degenerate into monotonous exhortation instead of consisting of definite, progressive instruction which presents new matter each year as do the series of indorsed text-books. Therefore the laws of the National Congress and most of the States wisely specify text-books for pupils' use in this study in grades where books are used in other subjects, that is, from the fourth year upward. No such results as we are already able to chronicle in our own State could be cited from States in which this study is not pursued in the lower grades and where text-books are not required.

THE CHILD'S INTERESTS SHOULD BE CONSIDERED, NOT HIS LIKES AND DISLIKES.

Fifth. The report of the Science Teachers' Association lays much stress on its claim that the children enter the high school with less interest in this subject because they have studied it in previous years. This is not supported by evi-

dence. Of 320 replies which we received to the question, "Do the children in the various grades enjoy the study?" 257 say "Yes," or "As much as other branches." Eleven only say "No." The remaining 52 say: "It depends on the teacher" (18), "Some do and some do not" (11), "Yes, but most in certain grades" (23).

We doubt whether a better showing could be made for any other subject taught in the public schools if a similar question were asked in regard to it. Interest on the part of the pupil is desirable, and, as is shown by the figures above, is being secured in this as in other branches. But whether the children like this or any other study is a matter of little practical bearing on the question whether it should be taught. We do not ask, "Do pupils after having studied mathematics through the grades enter the high school with increased or diminished interest in that subject?" We do ask whether they have such an adequate knowledge of it as will enable them to take part intelligently in the affairs of the world. So with physiology and hygiene it is not a case of "increased" or "diminished" interest, but whether the child has sufficient knowledge to guide him in intelligent observance of the laws of health.

Besides, to view this matter almost wholly from the standpoint of the high schools, as does the Science Teachers' Association, is to fail to take cognizance of the great host of children who never reach the high school, and who will not have any intelligent interest to be either "increased" or "diminished" if instruction is withheld from the lower grades.

MISCONCEPTION OF THE CHARACTER AND SCOPE OF THIS INSTRUCTION.

The Science Teachers' Association reports that "the evils of alcohol and narcotics can be presented most effectively from the moral and economic point of view." An understanding of the physiological effects of alcohol is an essential basis for a comprehension of the moral and economic arguments against its use. Because alcohol as a beverage is injurious it is morally wrong to use it. Hence a knowledge of its inherent character and consequent effects is essential to an intelligent comprehension of the moral aspects of the question.

The Science Teachers' Association recommends that "the possible benefits of alcohol, when prescribed by physicians, should be conceded" in a public school study of physiology and hygiene. The object of this instruction is prevention, not to teach medicine. It is admitted by the most ardent advocates of the medical use of alcohol that it should never be taken on lay prescription. If the pupil is to wait for the doctor to prescribe it, instruction as to its therapeutic use belongs to the medical college and would be a waste of time in the public schools. Therefore the subject of its medical use is not treated in the indorsed books.

The objection now reiterated by the Science Teachers' Association that this is "the only study dominated by legislative enactment" was well answered by a prominent member in a speech before the legislature at the time of the passage of the present temperance-education law. He said in substance:

Yes, gentlemen, that is true, and the public necessity for a specific law for this form of education is self-evident. It touches a product that has to be dealt with as we deal with no other. We put no restriction upon the farmer's selling his fruit and vegetables, but should he turn them into alcoholic drinks, in the interests of the public good we put restrictions upon their sale in order to reduce the resulting evil to the minimum. This study puts the restriction concerning the use of these substances upon the intelligence of the future men and women of this State. It is upon that intelligence that we must depend for the future of civil government; therefore it is the acknowledged right and duty of the State to provide in this as in other respects for such education as is essential to good citizenship.

CONCLUSIONS AND RECOMMENDATIONS OF STATE CENTRAL COMMITTEE.

The answers to the inquiries sent out by our committee show that a large majority of the common school teachers believe in this study, appreciate its importance and object, and, as we have already shown, are doing faithful work that will make every lover of humanity glad and grateful for their service as the results of their labors are known.

From the answers received to our inquiries it is also evident that where dissatisfaction exists or where children are said not to enjoy the study, an explanation is to be found in one or more of the following causes:

First. The failure of school officials properly to arrange the course of study, with the result that the teachers feel this branch a burden.

Second. The selection of books unadapted to grade and the use of the same book through too many grades which leads to the charge of "repetition."

Third. The personal habits of teachers, in some instances not in harmony with the desired end of this instruction.

Fourth. Misconception of what the law really requires.

We rejoice in the measure of success that has attended our present system of teaching physiology and hygiene. The testimony in our possession as to this success in our State shows that as an educational force for right living this study has passed beyond the experimental stage to that of results justifying the expectation that this form of education is destined to overthrow the greatest evil and peril of our times. Therefore we are opposed to any effort to change the law requiring this study. In order that the State may receive the greatest amount of benefit from it we urge:

First. Cessation of destructive criticism of the law and the instruction it requires by school authorities whose duty it is to enforce the law.

Second. A sincere, conscientious, and earnest endeavor on the part of educators, normal school principals, institute instructors, and teachers to carry out the provisions of the law in a constructive spirit, to fit themselves to make the subject interesting and to present it properly graded in such a way as to inculcate the principles of hygiene in the lives of the youth of our State and make them intelligent total abstainers.

Third. The appointment of institute instructors who are in sympathy with the law and whose personal habits conform to the teaching; who have made a study of physiology and hygiene, as required by law, and who will apply to this subject up-to-date methods of teaching.

Fourth. That superintendents of schools and school officials prepare suitable courses of study, naming text-books and supplementary helps adapted to grade.

The report of the State Science Teachers' Association has been sent out to the teachers of the State, and the State central committee submit the foregoing reply in the best interest of the children of the State, and respectfully ask for its careful consideration on behalf of the committee for scientific temperance instruction.

DAVID JAS. BURRELL,
Chairman.

JAMES H. DARLINGTON,
First Vice-Chairman.

WM. T. WARDWELL,
Second Vice-Chairman.

ALFRED L. MANIERRE,
Secretary and Treasurer.

THE BATTLE AGAINST ALCOHOL IN THE UNITED STATES.

[From the French of F. Dupré La Tour, in the *Musée Social* for June, 1903.]

The problem of alcoholism is among those which occupy the first rank in the minds of thinkers in the United States.

A commission of fifty distinguished persons, appointed six years ago to inquire into the moral condition of the American people, began with one accord by a study of alcoholism. Under the direction of such men as Messrs. Carroll D. Wright, Charles W. Eliot, Seth Low, James C. Carter, and Doctors Peabody and Atwater, the work was divided among four subcommittees, who were to consider the problem in its physiological, economic, moral, and legislative aspects.

The four volumes, the result of this collaboration,^a which were prepared by such conscientious editors as Messrs. Koren, Calkins, and Wines, form an inexhaustible mine of information for the economist and the legislator. It would be presumptuous to attempt to add anything to them.

But for the foreigner, more interested in the struggle itself, with its vicissitudes and its maneuvers, than in its origin and legislative steps, this vast inquiry needed a commentary. It remained to observe on the spot the army of temperance, to follow it on the field of battle, and to try to discover the secret of its victories. This is the task which the writer took upon himself, and he gives here a brief résumé of the results obtained from an observation of three months.^b

The United States is a country favorable to alcoholism. The climate, with its extremes of temperature, there being no transition whatever from one season to another, invites the use of stimulants and tonics. The dry atmosphere makes the fortune of all dealers in thirst-quenching liquids. The dietary methods are execrable, and how could it be otherwise, since the workman or employee, obliged to take an hour on the "elevated" for his trip to and from the factory or the business place in the city, has no time to eat at his leisure, and has but a half hour at most for his midday lunch? So he pretends to satisfy his hunger with cold pie with a thick crust of flour and sweets, and it is not long before he feels the necessity of assisting his rebellious digestion with something healing to his weakened stomach.

The high rents (an average of \$3 a week for two rooms in the outskirts of New York) make it necessary for the workingman to limit the size of his lodging and increase the charm and social attraction of the public house.

Finally, that country is the rendezvous of emigrants from the four quarters of the world, some belonging to the sober races, as the Jews, Italians, and negroes; others carrying the weight of several centuries of intemperance, as the Irish and Scandinavians; but nearly all of them rendered incapable through poverty, loneliness, and even by the covetousness engendered by their small wages (\$10) of resisting the allurements of the vice which lies in wait for

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^b He wishes to acknowledge the cordial welcome given and assistance rendered by Dr. W. H. Tolman, correspondent of the *Musée Social*, New York; Dr. W. T. Harris, United States Commissioner of Education; Talcott Williams, editor of the Philadelphia Press; Father Doyle, Paulist, secretary of the C. T. A. U. of America, New York; Father Eliot and Doctor Shephard, Brooklyn; Miss Claghorne; Rev. Mr. Curran, pastor at Wilkes-barre, Pa.; O. Stewart, member of the State legislature of Illinois; Al. E. Wilson, Chicago; Rev. Mr. Noon, secretary of the Massachusetts Total Abstinence Society, Boston; Mr. Pearmain, broker, Boston; Mr. Koren, editor of the reports of the Committee of Fifty; Doctor Beach, Binghamton, N. Y.; Mrs. Anna Gordon, vice-president, and Mrs. S. Fry, secretary, of the W. C. T. U.; the professors of the University of Pennsylvania; the members of the Lyonnaise colony at New York; Mr. Ingres, president of the Alliance Française, Chicago.

them. Each year the newcomers form a new mass of citizens to be converted to temperance, thus keeping in full vigor the zeal of the apostles in spite of all the victories which have been gained.

Moreover, the race which results from so composite a mixture of blood is particularly active and nervous, violently attracted, when days of dejection occur, by the excitement which alcohol procures for them and implacably vanquished by it.^a

The breaches thus opened by the existing conditions are still more widened by certain social customs. That of "treating," for instance, which corresponds to the "tournée" of our public houses, with this difference, that every participant there is obliged to return the courtesy immediately. There is also the peculiar institution of the "free lunch," a kind of buffet gratuitously opened in the public houses to every buyer of a drink. The greater part of the dishes which are placed within reach of the hand are ingeniously chosen to excite an inextinguishable thirst in the customer who allows himself to be tempted by them. Yet they attract a great many poor people, happy to find for the small sum of 5 cents (price of a drink) the means of getting an actual dinner.^b From this point of view it can not be denied that here they really play a philanthropic rôle. At any rate this is a service which the public houses in the cities of the United States render and which attracts to them a great number of passers-by.

For some inscrutable reasons, which are not those of economy, the municipalities exclude from the streets certain public conveniences. The saloons and the hotels are the only recourse. But in performing an act of charity they find their recompense, for there is more than one passer-by whom the sight or simply the odor of whisky holds for an instant near the bar.

In order to render clear the character which alcoholism assumes in the United States and the remedies which are necessary, nothing can be more instructive than to observe a drinker in the exercise of this habit.

Let us then enter a public house, a "saloon" of a large city, Brooklyn, for instance, and see how the Americans drink. Generally situated in a populous street, its outward aspect is somewhat engaging. The glittering architecture contrasts with the poverty of the neighboring houses; a screen before the door and curtains at the windows keep outsiders from seeing what goes on inside.

We enter; not a chair in the shop. The bar occupies the farther end, with waiters in white aprons who attend to the customers. On the walls are hung mirrors and pictures representing nude figures which the artists in this specialty have been obliged to sell there cheaply, there being almost no other place at present where they can dispose of them. On the counter are some gambling or slot machines where cigars or drinks may be won.

There seem to be very few people there and at first one wonders how the saloon keeper can make expenses. Two minutes of patience give us the key to the mystery. The customer does not remain. He enters, goes straight to the bar, drinks, and departs. Ten times in a few minutes the bell of the cash register machine has announced a receipt and yet the saloon always seems empty. Twice a day only, at lunch time and at the closing of the workshops, it will be filled for some time by the lovers of the free lunch, who come to dip into the dishes.

^a Even the best known and most wealthy families are not spared from this scourge, and sometimes one hears it said that such or such a member of some family has suddenly disappeared from society, his future sacrificed to a sudden passion for alcohol. The only means of safety for him thereafter is through some of the agencies for redeeming drunkards.

^b On Friday a great number of the public houses replace meat with fish to satisfy their Irish Catholic customers.

The delicate manner in which the habitués of our cafés sip their absinthe is not known, nor the long idling over an empty glass on the terrace of our boulevards. The cocktails themselves are beginning to disappear from their native soil, their skillful preparation requiring too much care. Beer or whisky is drunk, not to kill time, but to satisfy an ungovernable thirst.

In undertaking the warfare against such an enemy two kinds of tactics have been combined. The first undertakes the reformation of the drunkard and the formation in the younger generation of sober habits; the other is especially directed to the suppression or restriction of the traffic in liquor by legal methods, and attacks the saloon as the source of every evil.

Far from being in opposition the two methods complement each other wonderfully. If it can be said that the drinker creates the saloon, and if the first care of the reformer should be a campaign of individual reformation, on the other hand the absolute lack of restraint of the places of temptation seems too severe a test for even the best disposed.

The writer proposes to review successively the two great phases of the anti-alcoholic war.^a

I—SAFETY AND REFORMATION OF THE INDIVIDUAL.

The religious denominations, the temperance societies, and the public schools devote themselves specially to the preservation of the individual, seconded powerfully in their efforts by the necessities of the struggle for existence.

AGENCIES WHICH OPERATE TO SAVE.

The temperance preached in the United States is very different from that championed by its apostles on the European continent. No American is entitled to the right of being called temperate if he uses beer or wine, and still less so if he sells it. Temperance in that country occupies itself exclusively with total abstinence from all sorts of drinks containing alcohol in any degree whatever, fermented or distilled. We are so far from having this one of the rules of our antialcoholic societies that certain ones have been found excessively severe in prohibiting alcohol altogether, and we remember having greatly scandalized the "temperance men" in America in letting them know that the president of one of our most important temperance societies is a large proprietor of vineyards and sells, besides, some excellent wines.

It may be asked if there is not a certain sign of weakness in the pledge of total abstinence to which the adept of temperance of the Anglo-Saxon race flees for refuge, and if the position which discerns strength in moderation is not the better one.

Should this reasoning, recognized to be false as regards the drinking of distilled liquors on account of their terrible property of increasing the desire which they pretend to assuage, apply to fermented drinks? This depends, in the first place, on the temperament of different peoples. The distinctive character of the American is a lack of moderation in everything that he undertakes, good or bad. Moreover, as we have seen, alcohol is particularly attractive and injurious to him. It is thought that for him, under these conditions, it is more profitable and easier to abstain totally than to stop or limit the abuse when it has

^a A third method has often been pointed out as very efficacious in combatting alcoholism. This is to take away from the saloon all of its attractions by providing better institutions for the needs of rest and recreation of the people, such as cheap dwelling houses, popular universities, libraries, sporting clubs, etc. The Committee of Fifty has made this the object of a special inquiry contained in the fourth volume, "Substitutes for the saloon." This study, which embraces the entire philanthropic field in the United States, exceeds the limit of this sketch.

commenced.^a Environment and habits play also a great rôle. In France we drink during the meal wine produced on our own soil, clear and light liquids, which are commonly used at the family table with the addition of water. In the United States fermented drinks are generally absent from the meal, and the stranger who for the first time takes a seat at a table in a New York restaurant is astonished to have a glass of water offered as the first mark of hospitality.

The explanation of this general abstinence is very simple. The native wine, the greater part of which comes from California, is mediocre, and if it is imported from beyond the sea is too much charged with alcohol. On the other hand, the water is very pure in nearly all the large centers, and this quality, added to the good habit they have of always serving it cool, makes anything else unnecessary.

Moreover, the greater part of the popular restaurants do not care to pay the liquor license, and the customer who wishes to drink beer or wine is obliged to go to a neighboring saloon and there submit to the dangerous contact of the saloon keeper and the drinker of alcohol. They have thus been led to adopt a radical programme for temperance.

Finally, the radicalism of the American apostle of temperance becomes still more comprehensible when it is remembered that the temperance movement was born fifty years ago when whisky was the favorite drink. Despite the progress accomplished since the start, the plan and the banner remain the same.

Rôle of the religious denominations.—If, landing on a Saturday evening at New York, the inquirer into antialcoholism has the curiosity on the following morning to go to a church in the outskirts, Methodist or Presbyterian, the chances are even that he will hear a temperance sermon. If, in the afternoon, he should promenade the length of First, Third, or Ninth avenues, he will infallibly perceive, forming a circle, the Salvation Army; when he draws nearer he hears an orator improvising a public speech, who recounts his conversion to total abstinence. And in the evening, in the most miserable localities—the Bowery, for example—he will see here and there a wooden chapel bearing the inscription, “Christian Temperance Mission,” which opens its doors on that evening. There are a great number of people coming and going. They hear a sermon on temperance here also, but one managed with such art that at any hour of the evening, without a single exception, they are sure to hear within five minutes the entire series of customary arguments. At the end of the day the inquirer returns persuaded that in that country alcoholism has reached immeasurable proportions. The fact is that it is not alcoholism, but the anti-alcoholic movement, which holds such an exceptional place. The Protestant churches have always been specially devoted to the cause of temperance, possibly because there can always be a certain agreement on that subject between the pastors and the members of the congregation; more probably, however, on account of the apostolic zeal with which they are animated. In the first rank are the Methodist and Presbyterian churches. These two sects exclude from membership the manufacturers and sellers of alcohol and all those who are silent partners and guarantee the establishments or who lease them their locations.

The Methodist Church goes still further and makes total abstinence a religious precept, the violation of which entails a reprimand from the pastor the first time and at the third offense a dismissal from the church, at least unless there is sincere repentance.^b

^a Unsuccessful attempts were made about the year 1850 to organize in the United States temperance societies of the French type of to-day.

^b Book of the discipline of the Methodist Episcopal Church, article 248. Minutes of the Assembly of the Presbyterian Church, 1877, page 558.

Carrying the consequences of their doctrine into the domain of politics, the pastors of these churches, with a freedom of speech which would be startling in other countries, but which the American people find perfectly natural, never lose an occasion to affirm officially their sympathy with the Prohibition party and make it the duty of their followers to support it.^a We see further how they are obeyed. It is no longer rare to hear them from their pulpits inveigh against some license law or some violation of a prohibitory law by the constituted authorities.

As to the Catholic Church, its great number of Irish members and emigrants of the poorer classes imposes on it the duty of occupying itself especially with the question of temperance. It has performed its task with zeal and success, and if it can still be said that out of every two drunkards and every two saloon keepers in the United States one is a Catholic, the proportion of its apostles of temperance is at least as great. The Catholic hierarchy keeps its place at the head of the movement. Such men as Mgr. Ireland and Mgr. Keane are the personalities most in evidence. Abstainers from the first (Mgr. Keane having had for godfather in the temperance crusade Father Mathew himself), they never miss an opportunity to descend from their pulpits in order to mount the platform at popular meetings, side by side with the ministers of other denominations. According to the memoirs of Abbe Maignien, who was for thirty years superior of the great seminary at Baltimore, it was not always so. Formerly the priests abstaining formed the exception. Nevertheless the priests of those days were good, coming for the most part from the Emerald Isle, that blessed country where Saint Columba, establishing the rules for his monasteries, punished with 30 disciplinary stripes a simple infraction of routine and with 5 only a case of notorious drunkenness.

To-day the priests not having made the vow of total abstinence are the exception in the United States. The very great influence of the Catholic priest over the faithful, which a profound faith and Irish traditions have consecrated, renders such examples fruitful.

The church in America has felt called upon on different occasions to formulate officially its doctrine regarding temperance. While recommending the practice of abstinence as a virtue, it divides itself clearly from its Protestant sisters, Methodists and Presbyterians on the question of precept, and establishes a fundamental distinction between "the abuse of intoxicating drinks, which is a sin, and their moderate use, which is not, at least until it becomes of such a nature that it verges on abuse."

The saloons, on the contrary, are looked upon with the greatest distrust on account of the temptations which they provoke. "If the sale of drinks with an alcoholic base is not in itself a sin, it leads the saloon keeper fatally toward it; who, unless he is careful, encourages habits of intemperance among his customers."^b

It is therefore against saloon keepers that all the severity of the church is directed. A certain number of bishops, following the lead of Mgr. Watterson, bishop of Columbus, Ohio, even went to the point some years ago of refusing

^a The general assembly of the Methodist Church at Chicago in 1900 renewed "the forbidding to Christians to support the political parties which adopt the principle of license and refuse to enter into open hostility to the saloons."

The United Presbyterians in their session of May, 1900, declared that legal authority given to the liquor traffic is a sin against God, a crime against man, and affirmed that parties affiliated with such politics had no right to the votes of Christians.

^b Inserted at the close of the proceedings of the ninth diocesan synod, at Baltimore, September 24, 1886; abstracts of Mgr. Roosevelt Bailey.

them admission to religious and charitable associations, among others the society of St. Vincent de Paul. This decision was not reached without active protestations, and although the nuncio, Mgr. Satolli, felt it his duty to confirm this decision, some prelates, like Mgr. Spalding and Mgr. Ryan, at the head of the episcopacy, have always refused to subscribe to it. Little by little, however, the Catholic societies of the territory in question have themselves rallied to the side of severity; and to-day the clause providing for the exclusion of saloon keepers is found in most of their statutes.

Temperance societies.—The apostolate of temperance draws inspiration from the churches; it carries on its work chiefly through the temperance societies. If one opens the directory of a large town at the heading "Temperance," he is astonished at the number of these societies holding meetings, having organs, and sometimes having a permanent office in the town. In 1902 one could count 77 periodicals devoted to temperance, of which 24 were weeklies, and besides innumerable local associations, there were half a score of national federations.^a

It is necessary to distinguish among the associations to promote temperance, first, the temperance societies properly so-called, which devote themselves to the individual propaganda, and, second, those having a political character, which aim to see that the laws are executed, or to carry measures of reform with more rigorous provisions. The study of these latter will of course find its proper place in connection with legislation.

The temperance societies properly so called comprise denominational societies, secret societies, and a great association of women, the Women's Christian Temperance Union, or, more briefly, the W. C. T. U. There are besides a certain number of school children's societies, employees' associations, and sailors' or soldiers' unions, which are either associated with the first or are too much scattered to receive attention.^b Finally, there is another new federation with a somewhat sensational title, the "Blue Button Army," whose object is only to give play to certain unemployed forms of activity, and whose members are in reality recruited from the ranks of the preceding societies. We will limit ourselves to speaking of the first group.

The common character of all the associations is the obligation imposed upon their members to take the pledge of total abstinence. The form, the ceremonies, and the length of time in force of this pledge vary according to the nature of the society. In general, the members are required to sign a formula something like the following: "I solemnly promise, with the help of God, to abstain from all distilled and fermented beverages, and in particular from wine, beer, and cider, and to use all my efforts to discourage their use and to prevent traffic in them."

Among the church societies the most important is the federation of Catholic societies, the Catholic Total Abstinence Union of America (C. T. A. U. of A.), which comprises 1,000 societies and has 89,000 members. I was enabled to substantiate the fact of its vitality at the annual congress held in August last at Dubuque, Iowa. Three hundred and fifty delegates, priests, and laymen were present, under the direction of Mgrs. Ireland, Keane, and the archbishop of Cincinnati. The annual report showed an increase of about 4,000 members over the preceding year, and an increase of about 38,000 members in eight years.

^a A central bureau of publicity and information, organized at New York under the name of the "National Temperance Society and Publication House," under the direction of Rev. J. Dunn, renders invaluable service.

^b We shall mention farther on the societies of school children. With regard to those of soldiers and sailors, found everywhere, they are specially the care of the great and beneficent Y. M. C. A., or form a special branch of the W. C. T. U., Sailors' Homes, etc. It seems that this special mission has done a great deal of good.

The dominant trait of the Catholic temperance society, which constitutes both its strength and its weakness, is its parochial and intensely religious character. Its grouping about the parish has the advantage of assuring recruits, but the influence of the priest, the statutory spiritual director, does not hesitate to exclude from the pale of the society those Catholics who are not judged sufficiently fervent, and the temperance society becomes a brotherhood.

There are few Methodist or Presbyterian societies (with the exception of the Sunday school societies); and this is not to be wondered at when it is known that temperance is an inherent part of the worship of these sects.

On the contrary, it would seem very natural to find temperance societies among the adherents of the Episcopal Church; there are, in fact, a few. For originality of methods I would point out the Church Temperance Society. Rev. Mr. Graham, who is the soul of the society, has undertaken to install in the streets of New York fountains of ice water, where the poor people can refresh themselves in the summer season; he has also installed on the public streets wagons from which are sold temperance drinks and good food at low rates. But the most original scheme is the organization of a wagon service for the transportation of hot coffee to firemen at the scene of a conflagration, and to the cabmen who spend the night waiting till the balls are over. This last service is paid for by a contribution of 10 cents for each person invited, which is requested of the persons giving the ball, who have never yet refused.

The secret societies were formerly very numerous and very important. There were as many as six federations. The greater part of these are dying out, or have become societies in which the mutual-aid feature is predominant. The only society worthy of attention which has avoided that stumbling block is the international federation of Good Templars. Very unequally divided throughout the Union, with their principal lodge at Milwaukee, Wis., it is difficult to determine their total number in the United States. The official statistics of the supreme lodge stated the number on May 1, 1902, as being 57,503 members, about 5,646 less than the preceding year.^a

It might be asked what secret a temperance society would have to keep. I asked this question of Mr. Mann, past grand master of the order.

"Its aim," he replied, "is simply to attract toward temperance people of the ordinary class, especially young people. We pique their curiosity by the mystery which surrounds us, and which consists of a simple password, and we satisfy their liking for show and ceremonies by the decorations with which we adorn them and by the rites of initiation. We finally gratify their ambition for diplomas by establishing various grades and by having them pass examinations in temperance."

Perhaps it is not unnecessary to add that these secret societies are not hostile to the religious idea, but that on the contrary they firmly sustain it.

Women's Christian Temperance Union (W. C. T. U.).—This association outranks all the others by its importance and vitality, and will detain us longer.

For one who has studied the American woman it is not surprising that this is so. Through her personality, overflowing with energy and activity, the American woman appears to the eyes of the foreigner as the most remarkable product of the civilization beyond the sea.

It is rare, outside of the moneyed aristocracy, to find an unemployed woman. A certain number earn their living without being compelled to do so, because their conscience tells them it is their duty to make themselves useful.

Among those who remain at home, a great number apply themselves to litera-

^a Proceedings of the fourteenth congress, held at Stockholm, July 8-16, 1902.

ture, to philosophy, even to sport; but a very large number are eager to devote themselves to good works, perhaps because of the natural goodness of their heart, perhaps because old maids or widows, they have been formed in the school of suffering. There are no convents for them; they perform their mission in the world armed with the motto of the W. C. T. U., "For God, home, and native land."

The W. C. T. U. was founded in 1873 under picturesque circumstances. After an unusually eloquent sermon on temperance the women of Hillsburg, Ohio, started on a crusade against the saloons of the town. They assembled together in the street and repaired to the saloons; there they adjured the drinkers to give up their vices and the saloon keepers to renounce their traffic in the name of Christ. Such a spirit of enthusiasm was inspired, the story goes, that a great number of the saloon keepers were converted, and there are still exhibited, piously preserved among the relics of that heroic time, the bar furnishings with which the repentant dealers showed homage to their persecutors.

The leader of the movement was Miss Frances E. Willard, a woman of rare merit, who until her death, about five years ago, remained at the head of the association and exercised a preponderating influence.

Founded at first solely with temperance as its aim the W. C. T. U. soon found its primary scheme too narrow. Even as the Mississippi, when the spring floods come, overflows its borders and fertilizes the neighboring plains, the accession of willing spirits to the ranks of the W. C. T. U. was so great that it was obliged to enlarge its sphere of action in order to satisfy their demands.

The W. C. T. U. numbers at the present a total of 450,000 paying members, spread over the entire world, of whom 150,000 live in the United States, divided into 62 unions, each of which has a committee, and in the large towns a journal and a permanent bureau. Their programme is as large as their heart, that is to say, without limit, and the way in which they carry it out adds still more to its natural poetry.

It was revealed to me in all its simple grace at the annual congress of the W. C. T. U. held at Portland, Me., last October, under the chairmanship of Lady Henry Somerset, president of the federation, who had come from England for that purpose. The committee of arrangements had conceived the very ingenious idea of having a demonstration night, when the different sections of the association came on the scene successively to explain their aim, their methods, and to give some examples of their results.

There were about forty specialties—from the sanctification of the Sabbath to pity for animals; from the teaching of the duty of giving a tenth of one's goods to the poor to that of proscribing the use of alcohol in therapeutics. There was the committee of the workers among the negroes and the Indians; the committee on soldiers, on sailors, on employees of the railroads, on watchmen, on policemen; there was a committee for the sermons in the churches; the committee on the campaign for woman suffrage, for the proscription of the cigarette, for the war against impurity, for forbidding the use of fermented wine at the Lord's Supper; the committee on visiting the poor, etc.

Each passed in its turn, the president at the head, followed by the converts and the emblem bearers with their banners. Advancing to the platform the president read a report several lines in length and then she spoke, her followers behind her sketching the scenes of which she spoke by tableaux.

The president of the committee on evangelization announced to the public that during the year 1901-2 there had been given by the members of the section 37,690 public discussions, 5,268 sermons in the churches; they had distributed 3,694,000 pages of temperance pamphlets, and had made in all 1,666 conversions.

The president of the committee on soldiers, still young and pretty, advanced, followed by veterans of the civil war, and addressed the assembly: "You see," she said, "men who have served their country and whom we love and will do everything in our power to render their lives strong, temperate, and pure."

"Pray for these brave men," said the president of the committee on policemen, "because they protect your firesides. Do not forget the debt of gratitude which we owe to them." And the brave policemen in sincerity—as all the soldiers, the sailors, and the watchmen—made no demur, because they were under the charm, and because they felt that there dwelt in these women the real affection of mothers.

The president of the committee on purity advanced, followed by children and mothers who carried babes in their arms, and proclaimed the need of a common code of morals for both sexes, a more efficacious protection for young girls against seduction, and curfew laws for the children and strict repression of all pernicious literature.

The committee on flowers in its turn announced that in 1902, 50,000 shrubs, 7,000 packages of seeds, and 200,000 bouquets had been distributed, wrapped up in the same number of leaflets of the Holy Scriptures and the temperance journals.

In seeing this touching procession of charity and devotion, as long as the list of human evils, unroll itself, one could not but marvel at the inexhaustible fruitfulness of a feminine temperance association, and the motto of Miss Willard, "Never to let an opportunity to do good pass by" ("Do everything"), came to mind at the same time with the verse of the poet of the "Contemplations."

"Woman is on earth
For its idealization."

How could it be otherwise on the battlefield against intemperance than for such an army to gain victories? Who could resist the influence of women so persuasive, so generous, and, it may be added, so persevering in their aims?

The ministers of the churches, mindful of their campaign in favor of the tithes, support them by their influence.

The public authorities themselves, unceasingly harassed by petitions, agitations, the appeals for decisions, end by yielding, either unwillingly or graciously; and no one can say whether it is for the sake of pleasing the parliamentary committee of the W. C. T. U. or to get rid of it that more than 400 municipalities have introduced the rule of the curfew bell;^a that all the States have successively introduced obligatory instruction in temperance in the schools; that the Congress at Washington has passed an anticanteen law, prohibiting the sale of alcoholic liquors in the Army and the Navy; and, finally, that the Mormon polygamist, Mr. Roberts, was prevented from taking his seat in Congress.

Instruction in temperance.—The obligatory instruction of temperance in the schools is assuredly one of the principal factors of protection against alcohol. It is also one of the greatest triumphs of the W. C. T. U., and principally of Mrs. Mary Hunt. It was obtained after a most indefatigable campaign of twenty years. In 1882 not a State had this law. In 1902 the four last to yield were obliged to give in to the force of public opinion. It is quite interesting to find in this rear guard a State in which women are electors—Utah—which should have been at the head of the movement, if it be true that suffrage adds to the political and social influence of women.^b

^a The "curfew law" punishes with fines the parents of children under 12, 13, and even 15 years of age, who run the streets after the sound of the bell (generally at 8 o'clock in the evening).

^b This tends to prove that the dream of Miss Willard, "temperance through woman suffrage," is not yet ready to be realized.

The laws on instruction in temperance differ in various States as to its being obligatory or merely sanctioned. According to the law of New York (the most complete), temperance must be taught for eight years in all the primary and secondary schools supported by the State, at the rate of twenty lessons a year in the three primary classes and thirty lessons in the five higher.

The intention of the law is certainly most excellent; but it may be asked, with Mr. Thomas S. Cole, principal of the high school of Chester, if it is not presuming too much on the patience of the pupils to compel them during eight years to listen to the same teaching; for, if one examines the series of manuals he will find that they vary very little.

The poet Pope says somewhere:

Vice is a monster of so frightful a mien,
As, to be hated, needs but to be seen;
But seen too oft, familiar with her face,
We first endure, then pity, then embrace.

There is also the question as to the scientific value of the manuals placed in the hands of the pupils. Some doubt as to this has been raised by Doctor Atwater and other savants, which has raised a veritable tempest in the camp of temperance. It would be rash for us to take part in this controversy; however, when we read in the school manuals of Mrs. Hunt that cider makes all those who drink it disagreeable and of bad character, often cruel, and indifferent to good (*Physiology and Health*, I, p. 29), one must ask if even an apostle so admirable as Mrs. Hunt and so disinterested an author that she has given up all income from her books, does not give to her pupils ideas of physiology which are a little too exaggerated.

In the double aim of reaching children who do not attend the public schools and of keeping in a right mind those who do, instruction in temperance is also given in the Sunday schools, which are a sort of catechetical schools, directed by devout persons in collaboration with the pastor. It is from such environments that the younger temperance societies are recruited, and to the organization of which the Massachusetts Total Abstinence Society is devoted, of which the Hon. J. D. Long, formerly Secretary of the Navy, is president and Rev. A. Noon, secretary.

The necessities of the struggle for existence.—Economic forces render powerful aid to the churches, the temperance societies, and the schools. In order to use such machines as the self-binding mower, the farmer has no need to give himself artificial strength. On the contrary, he needs to keep constant watch in order to avoid damaging his machines, to have great skill in repairing them, a quick eye to enable him to choose them before making his purchase, and some reserve capital with which to pay for them. All this drives whisky from the farm. How much more necessary to have men with entire clearness of mind and an unshattered nervous system since the wheelwork of machinery is becoming more delicate and exact, its quickness is increasing, the watch over it is growing more minute, the responsibility is redoubled, and the strongest competition lies in wait for the least fault and the minutest degree of weakness. Moreover, the greater part of the great captains of industry are obstinately opposed to the intemperate workman.

The great railroad companies go still further. They insist that their employees be abstinent, at least in the broad sense of the word. The rule of the American Railway Association demands that the use of intoxicating liquors during the hours of work be prohibited. Their habitual use or the frequenting of places where they are sold is sufficient cause for dismissal. This rule is applied strictly by the greater number of the companies. Secret inspectors watch suspected employees to such an extent that, having taken their photo-

graphs at a bar, the proof is complete and discharge follows.^a This rule may seem severe and the espionage offensive; but, as the editor of the Railroad Gazette remarked to me, "It would be impossible to tell by his simple outward aspect whether a man's nerves are still influenced by the libations of the night before."

Commerce and banking also, from the point of view of requiring sober qualities, compete with the more delicate and dangerous industries. In the columns of "Wanted, employees," in the Sunday papers of from seventy to eighty pages, one is struck by the great number of advertisements: "Wanted, a sober and active clerk."

Thus it will be seen that sobriety is demanded in equal measure with honesty and energy on the part of the accountant, the cashier, and even the salesman of the fashionable shops, who will not be allowed to wait on the ladies if he smells of whisky. Great merchants, like Mr. Wanamaker, considered by everybody as model employers, are inflexible on this point.

If the fear of being dismissed is for many the beginning of temperate lives, the example of the more important men in the affairs of the world exercises a profound moral effect. When they see such a man as Mr. Rockefeller, with his \$75,000,000 annual revenue, strictly abstinent, they ask themselves if possibly abstinence may not have had something to do with his millions, and they abstain. It would not amount to anything with them to be told that Mr. Rockefeller has some stomach trouble. Mr. Rockefeller represents an ideal to them, and they wish to hold all the trump cards in their game.

The universities endowed by the millionaires necessarily feel the influence and spirit of their founders, and with all the more docility that, these not yet being dead, the list of their generous donations is not yet ended. Thus, at Chicago, beer and wine are excluded from the table of the Professors' Club.^b

Trade unions.—In their turn, the trade unions have also taken up the question. Besides the individual and professional interests of their members, they are led to take this stand by motives of the general order. Formerly drinking places were chosen for the meetings of the trade unions. All this is changed. The development of the organizations, the importance of their financial operations, the control of their aid funds, the direction of the great masses of men who at a word from their chief quit their work and return to it, make it necessary that their leaders shall be men of great clearness of mind and judgment; and on election day the reputation for temperance in the candidates for the offices of president and secretary is a recommendation to the least temperate of the members of the union.

From another point of view, but for reasons quite as plain, the greater part of the unions, and especially all the brotherhoods, refuse to take care of their members who have been dismissed for drunkenness and deprive them of all participation in aid during idleness and sickness. In addition to this, a very great number exclude from their ranks dealers in liquors. Finally, the trade unions are forced to impose temperance at times of strikes in order to lessen their financial responsibility and to prevent the disorders which might be at the risk of alienat-

^a In an inquiry conducted under the direction of the Commissioner of Labor, in 1897, among 7,000 industrial establishments employing 1,700,000 persons, 5,303 replied that they never employed anyone without being first informed as to his sobriety, and 1,794 that they absolutely prohibited the use of intoxicating liquors to their workmen. The reasons given were not at all philanthropic ones, but purely and simply those of interest—to prevent accidents, to assure better workmanship and stricter economy.

^b The Ambassador of China, who was invited recently to respond to a toast at a banquet of this club, asked, like a real *enfant terrible*, why all these banqueters, who doubtless were fond of wine in private, should not find it to their taste at the "quadrangle club."

ing public opinion. Just this last year, at the time of the great strike of anthracite miners, Wilkesbarre, headquarters of Mr. John Mitchell, president of the Federation of Miners, a city of 50,000 people, had nearly all the saloons closed.^a

Thus it can be said, with Mr. Gompers, president of the American Federation of Labor, that the trade unions have done more to favor temperate habits than all other organizations together.

In enumerating the forces which make for temperance may be added the reduction in the premiums which many of the life insurance companies allow, following the example of the principal one, the Equitable, which grants this to total abstinent on account of their greater longevity, as shown by statistics. The influence exercised by these examples in a country where insurance is so common is not to be passed over.

We will surprise no one in saying that this formidable army of temperance, aided by such powerful allies as economical forces, vastly influences public opinion. Consequently he who wishes to drink is obliged to conceal himself. The saloons have screens at their doors and at their windows, and in spite of that, fearful of losing their places, employees in the stores and mechanics scarcely dare to venture in.

Last February the members of the American Congress found themselves obliged, under the pressure of public opinion, to exclude from their café all liquors containing alcohol. The future will decide if parliamentary eloquence has lost anything.

Drunkenness has become a shameful vice. Not only is it no longer allowed, as was formerly the case, in good society, but if there is a drunken man in a car the conductor pulls the cord and puts the unfortunate one in the open fields by the roadside. Therefore those who are tainted with this vice seek to get rid of it.

AGENCIES OF REFORMATION.

There are special establishments whose aim is to cure drunkards. Some are called "Keeley cures" or "Gold cures," and make use of a homeopathic treatment with strychnine as its base, which gives a temporary distaste for alcohol.^b There are also hospitals for inebriates, inebriate asylums, some of which are for women specially, which have not done all that was expected of them.^c The most celebrated, that of Binghamton, N. Y., has recently been obliged to close.

The difficulty in the therapeutics of drunkenness is not that of a temporary cure. The problem is that the drinker should remain cured when he has again taken up his old life and his ordinary diet, returned to his habits and customs, frequenting the same street where he finds the same saloon and the same saloon-keeper friend who lies in wait for him.

From this last point of view the Christian homes for inebriates have accomplished marvels. The Franklin Reformatory Home for Inebriates, at Philadelphia, is a consoling spectacle for human dignity, for from its portals 70 per cent depart not only cured, but armed for the battle.

^a To the influence of Mr. Mitchell was added that of one of the Catholic priests extremely popular among the miners and one of the champions of antialcoholism, Father Curran, who had succeeded in influencing three-fourths of his parishioners to take the pledge. The priest and the leader of the strike were of mutual assistance in their work.

^b Opinion is divided as to the definitive success of this treatment. There have been, it seems, patients who have died of it, and others who on leaving the institutions have immediately returned to the vice. The Keeley cure hospitals, scattered all over the United States, have their secrets and mysteries, as have all other medical institutions.

^c A periodical, *The Journal of Inebriety*, serves as the organ of these different institutions.

The method used supposes the patients to be of a religious nature, as Americans generally are. After having given to the patient the first treatment which his condition demands, generally one of alimentation, the treatment becomes essentially moral. They are brought to the conviction that hereafter the simple fact that they do not flee from an opportunity to gratify the vice would be a sin as great as the lapse itself, since the one leads fatally to the other; that to raise a glass to their lips would be a sin; to take alcohol into the house, or to pass the saloon of the neighborhood would also be a sin, and sin renders useless the blood which Christ had shed for them.

Simple experience has shown, said the superintendent of this institution, Hon. Harry Davis, an old inmate of a hospital, but to-day a criminal judge of Philadelphia, that if the motives of human interest lead patients to the asylum, only supernatural motives are sufficiently powerful to make them persevere. And if in the presence of temptation they can make themselves the judges of their human interests, this last resource will be wanting to them when it is God himself who weighs in the balance.

It must be added that the superintendents never lose sight of the patients who have gone forth from the asylums. They are invited to attend the weekly reunions and to share with the new arrivals their little experiences, and thus they are ingeniously enabled to convert some, and at the same time lead others to desire to do better.^a At the great festivals, and particularly at Christmas, they are invited to the table of the institution in order to be removed from the temptations of the family repast.

All social classes are admitted into these hospitals; but—a touching custom—the rich—and there are many of them—must consent to be cared for with the poor, drunkenness having leveled all ranks and made all social inequalities disappear.

II.—RESTRICTIONS OF THE TRAFFIC.

Should not the law aid in the work of saving and aiding individuals by making some effort to restrict the traffic?

There is not in the entire territory of the Union a single State which has not believed this to be its duty,^b and the system of complete liberty enjoyed by the public houses in France is here entirely unknown.

The principle of public law which, in the suits which have come before it, the Supreme Court of the United States has laid down as the basis of all American legislation is the following:

^a Mr. Harry Davis did me the honor to invite me on one of these evenings. There were about a hundred present; hymns alternated with the exhortations of the old converts; these narrated, with an ease which is only found in Anglo-Saxon countries, the faults of their past, then their conversion, and how, by the grace of God, they had been able to persevere. Then one after another made some remarks, animated for the most part and with an accent of truth which on other occasions had seemed to me to have been generally lacking in this kind of meeting. I brought away with me a touching remembrance of this evening.

^b We will only mention the taxes which the Government of the United States imposes on alcohol and all fermented liquors manufactured or imported into its territory. The Federal Government also exacts a license of every distiller and of every dealer, either wholesale or retail, in these different products. But in this case there is no thought of moral duty, the aim is solely to increase its revenue. The success in this particular is great, the total receipts from these different taxes in 1901 being \$191,697,887.21 on a total of \$306,871,669 indirect taxes, duties not included. The greater part, \$110,855,000, was derived from a tax of \$1.10 per gallon on distilled liquors; \$74,956,593 was obtained from fermented liquors at the rate of \$1.60 per barrel of 31 gallons. The purely fiscal character of this legislation is shown in the difference between the licenses required of wholesale and retail dealers, the first being four times as great as the second.

The State has the right as a measure of police to regulate or even suppress any traffic which appears to be a source of public danger without having to make any reparation whatever to the interests of individuals who may have suffered from such a law. Now the sale of intoxicating drinks comes in this category. (*State of Kansas v. Ziebold*, October, 1887.)

And elsewhere: No citizen of the United States can claim any natural or inviolable right to sell liquors with an alcoholic base. (*Crowley v. Christensen*, 137 U. S., 1886, etc.)

This principle applies even in a case where the State prohibits the sale to private individuals in order to reserve to itself the monopoly. It is considered to take this step only to restrain drinking. It is easy to understand how light the task of the reformer becomes in view of so inexpensive a past liquidation.

Active legislation in the United States is divided into three classes. The first prohibits purely and simply all traffic in the territory in question; this comes under the head of prohibition. The second regulates the retail sale of liquors with an alcoholic base in order to prevent its abuse; this is the law of license. The last makes a legal monopoly of the sale; this is the system of dispensaries. Some of the States have a general law for their entire territory, others leave the different communities free to choose such system as they prefer. This is called "local option," and is increasing in favor throughout the Union.

Prohibition.—The idea of purely and simply prohibiting a trade which can only prosper at the expense of the health and morality of the public was the first to enter into the minds of the reformers. We will examine successively the prohibition which extends over the entire territory of a State and that which is limited to a county or a community.

In consequence of the temperance crusade conducted in the middle of the last century by Gen. Neal Dow fifteen States had prohibition inscribed among their laws; the most zealous even had it incorporated in their constitutions. To-day, of that brilliant epic there are but four survivors—Maine, Kansas, North Dakota, and New Hampshire.^a

The complete defeat of State prohibition is attributable to two causes, the one external, the other internal.

According to the Constitution no restraint on the liberty of commerce between the States can be effected by local legislation (interstate commerce law). Now, if one State wishes to prohibit the public sale of alcoholic liquors within its territory, it can not prevent the products of a neighboring State from being sold at home. The consumer can thus give regular orders for packages bearing the mark of origin (original package) without breaking the prohibition laws. The law only intervenes if an attempt is made to traffic in them. It is easy to see, however, how difficult it would be to prevent fraudulent disposition thereof.

The greatest evasion is produced when the law attempts to govern all parts of the State indiscriminately without regard to the public sentiment of communities. The municipal organization furnishes a very simple means of rendering any law inoperative which is opposed by public sentiment. The candidates for the public offices simply receive orders to close their eyes to the violations of the law. And in order to be safe from judicial prosecution it is only

^a The latest defections are quite recent; that of Vermont was occasioned on February 3 last, in consequence of a recent vote of the people. At the moment of writing the American journals announce that New Hampshire, which had for some time been showing signs of disaffection and had begun to authorize the manufacture of liquor, but without authorizing the sale, is on the point of abandoning prohibition entirely. A bill has already been proposed in the legislature and has obtained a large majority. It is now to be submitted to popular vote.

necessary for the dealers to set themselves right with the internal-revenue office by paying the \$25 license required of every retailer in the Union.^a

Thus a State with prohibitive legislation is not a little like those which have left to the communities the liberty of choosing their system. In both cases the efficacy of the prohibitive measures depends on the public opinion of the inhabitants. But whereas in one case they violate or obey an existing law at will, in the other they enact the law of which they feel the need. This condition is intolerable in the opinion of all. The custom of seeing a law broken with the complicity of the local authorities creates a tendency to political morals incompatible with democratic institutions.

Two remedies have been attempted. One consists in withdrawing from the local authorities the execution of the liquor law and placing it in the hands of the governor of the State. But experience shows that one can not count too much on the good intentions of a man who, being elected by one of two great parties, the Democrats or the Republicans, would hardly wish to alienate the votes of any given community for a matter to which the majority of the electors thereof are indifferent.

There has arisen a group of men resolved to find a more ambitious solution, which, in case of success, can neither be compromised nor evaded. This has been nothing less than to form a new party entirely and exclusively devoted to the triumph of prohibition and which should undertake the task of imposing on the candidates for public office the command to execute the laws in the prohibition States, of obtaining votes in the other States, and finally of forcing the principle into Federal legislation, and even into the Constitution, and seeing it installed at the Capitol and the White House. This party, but little known in Europe, and which in reality is not a serious factor in the United States either as regards numbers or influence, politically or otherwise, nevertheless is worthy of attention for the original view which it gives of certain aspects of American character. In all the great cities of the United States the "Prohibition party" has a permanent political bureau, charged with looking after the local elections, where the antialcoholic inquirer is always certain of finding abundant information and a cordial reception. A Federal committee, equally watchful, is installed at Chicago. Its mission is to prepare for the Presidential election, the principal care of the party, because defeat itself is the means of a wide publication of the ideas which have succumbed on so great a field of battle.^b

It is with a sting of remorse that this inquirer is obliged to forget the flattering attentions of his hosts in order to set forth the facts impartially. The programme of the Prohibition party, as we have seen, consists essentially in the prohibition of the traffic in liquors with an alcoholic base on every bit of soil of the United States. That single article would appear somewhat too brief for a party which aspires to all the complex responsibilities of power from the post of President of the Republic to that of a sheriff in the smallest counties. Such at least is the thought which naturally presents itself to the mind of an inhabitant of the Old World. It is not absolutely justified.

The origin of the two great parties, Democratic and Republican, was also due

^a Thus one can read in the annual report of the Commissioner of Internal Revenue that in the prohibition State of Maine 1,191 dealers paid the license, 2,727 in Kansas, etc. Each of these cases shows an open and, so to speak, official confession of violation of the law.

^b The campaign is begun with every possible apparatus and with classic seriousness. A special train, called the Prohibition train, carries the Presidential candidate from one part of the country to the other, making fifteen-minute stops wherever a local committee has requested, and subscribed \$10. From his car the candidate harangues the voters until the time is up, when the train inexorably moves off.

to a difference of views on a single point, viz, the sovereignty of the States and popular franchise, which at a given period was considered of such importance that it became the bond of party and at the same time the stake of battle—the “issue,” as it is called.

One can hardly conquer a certain skepticism in view of the pretension to reform political morals and to attempt the recasting of old parties on a single question, however important it may be. This skepticism, however, changes to admiration when one sees how the Prohibitionists buckle down to their task. If, indeed, one has seen in certain places that the granting of privileges to distillers came near disjoining old party walls in order to cement a new one, how can one imagine that the question of temperance, the principle of personal sacrifice, may have the same cohesive force? It is hard to believe, in spite of its robust faith, that the Prohibition party can still preserve many of its illusions, since, at each new election, it sees the members of its societies and of the churches which have made the strongest official declarations in its favor, Methodist clergymen themselves, silently desert the party, carried away toward the old parties through some tradition, some personality, some question of the hour. One prohibitionist excused himself to me for having voted for Mr. Roosevelt, although he knew that he drank wine at his table, because Mr. Roosevelt had distinguished himself as a colonel in the Cuban war. And see how, after twenty-five years of warfare, truly worthy of a better fate, the Prohibition party has not been able to maintain itself in power even in the States which have adopted the system so dear to it.^a Still more discouraging is it to note that in the Presidential elections the number of votes in favor of its candidate, after having reached 263,000 in 1892, in 1900 showed only 209,000 votes out of 14,000,000. And in that total the State of Maine, the promised land of Prohibition, contributed but 2,500 votes out of 103,000.

In spite of fate the Prohibitionists remain faithful to their flag, and when gaps are produced they close their ranks. Does not their conscience tell them that drunkenness is an evil, and that the traffic in alcohol is its cause? They will, then, not disarm themselves so long as a single saloon exists and is tolerated by the authorities. To vote with the Republicans or the Democrats, who count in their ranks the dealers in alcohol, who take subsidies from the syndicate of the distillers, who finally vote for a budget obtained from a tax on alcohol, would be in their eyes to become accomplices and co-sinners. On the other hand, to confide to such the task of executing prohibition laws would be to show themselves dupes. The most zealous even refuse their aid toward reforming or diminishing the number of the saloons. Would it not be better, they say, that the evil should be seen in all its hatefulness? And they vote against the system of high license, or, as in 1892, in South Carolina, against a project of monopoly, which ended by making an alliance with the sellers of alcohol. Therefore at each local or general election they bring forward some of their own candidates in order that those who may wish to exercise their right of suffrage can at least do so without offending God. There is to be recognized in these characters a type which has not yet disappeared from the United States, the Puritan.^b

^a If it happens, as a great exception, that a Prohibition victory is announced, the causes are usually entirely local and temporary, such as a combination of malcontents who wish to give a lesson to the two official parties, or the popularity of some man, as of Mr. W. Oliver Stewart, in one of the districts of the State of Illinois.

^b I had the opportunity to attend some of the meetings of the party preparatory to the November elections, particularly one of the caucuses where the faithful were charged with the task of nominating the candidates of the party. The meeting was held at Brooklyn, in a Methodist church. A minister was called upon to lead in prayer. He rose, closed his eyes, and addressed his invocation to heaven. Then they took up the matter of choosing a candidate for the office of county sheriff. The office was not one of riches or

State prohibition is, then, only a decoy, and its failure has passed into a by-word in the United States. "Prohibition is a failure." "Prohibition does not prohibit." ^a Nevertheless, is there not a prohibition which does succeed? It seems that this may be answered in the affirmative when one sees more than half the rural counties actually under that system and satisfied with it. There is where prohibition has been given a "fair trial" (to use the English expression), by placing it, through the mechanism of local option, in a condition which gives opportunity for fair experiment. Local option has brought to light an almost invariable rule, viz, prohibition is suited to the country. It is inapplicable in the cities. Already it is to be seen that out of fifteen States which tried prohibition the four last retaining it were those inhabited by an agricultural people, and that in these States only the rural parts observed the law. ^b

The statistics of the places in which local option is the law are still more significant. In Connecticut, an industrial State of very dense population, in 53 districts voting for prohibition at the elections in 1902 the most important only numbered 8,540 souls, and, on the other hand, in the State of New York, out of 935 rural communities, 650 prohibited saloons.

What is the cause of this difference between the cities and the country? Two reasons may be given: A prohibitory law, in order to be applicable, must be supported by an almost unanimous public opinion. Everybody knows, of course, that a law becomes such by a majority of votes, but that if that law is injurious to the material interests or the habits of life of a certain number, it will not be possible to execute it unless the majority is numerically overwhelming or unusually aroused. In other words, it is necessary that the officers of the law must feel themselves sustained in or forced to its execution by an irresistible current of public opinion.

In the second place, a prohibitory law should be applied without the least weakness. Now, if one has time to think of the margin of profit which, under that system, the absence of a tax gives to illegal commerce it will be easy to understand the degree to which fraud is encouraged. To carry out the law the surroundings must favor surveillance or there must be an incorruptible police exclusively devoted to this work. Now, prohibition does not find any serious opposition in the country. If it injures some interests, they are neither sufficiently powerful nor well enough organized to make resistance profitable, and the surveillance of the police becomes an easy matter where all are acquainted with each other. The countryman, on the other hand, is indifferent to any injury which the law may do to the saloon keeper, and, finally, if he wishes to

honor. Indeed, it was simply a question of going from one political meeting to another in the entire district, without the least hope of success. For my personal edification the chairman asked the members of the assembly who had already been candidates for this office to rise; almost all did so; only one, a clergyman, remained seated. It was his turn to make the sacrifice. He debated for some time against the misfortune and the intemperate zeal of his too-devoted parishioners who nominated him; he felt compelled to yield. After that the party would be able to hold their campaign and sow the good seed in a desert where, to borrow the Puritan language, not even the thorns and thistles of opposition would grow.

^a A great number of foreigners, however, continue to be convinced of the efficacy of prohibition, because in traveling in a Pullman car in Kansas or North Dakota, on the way to the Pacific, they refuse to serve in the dining car the wine which would beguile the tedium of the journey. It is precisely on this very impression that the authorities count as a means of spreading abroad their virtues. Thus the railroads have become the last asylums and the most jealous guardians of prohibition, where one might have thought that they would be the first to profit by some tolerance.

^b Out of 370 towns of less than 1,000 inhabitants in Maine, 300 observed the law and were not found on the Federal tax registers. On the contrary, out of 192 more important places, only 79 had remained faithful, and of this number 74 had less than 2,500 inhabitants and 5 less than 3,500.

drink, he has apple cider, and if this is not enough he goes to the neighboring town.

In the cities, on the contrary, the problem presents a very different aspect. I will not return to the debt of gratitude which the saloon keepers have earned from all men who are not without tenderness of heart for having supplied certain necessary facilities which are neglected by the municipalities. Saloons are necessary from another point of view. A hotel simply vegetates which does not sell alcoholic liquors. Now, a hotel in the United States is an institution which presents the character of general public utility. In a central hall all the organs of business life are grouped—offices of the different sorts of transportation service, of the post-office, the telegraph companies; there are cigar stands, newspapers and reviews, water coolers, writing and reading rooms. Everything is free to all, and many of the business men make it their rendezvous. But for the ice water and the paper and the reading room, however freely offered, there must be some source of compensation. The principal one is the bar; to suppress it would be to ruin the entire organization, and would even seriously affect the course of life of the city.^a

In the towns the saloon is the eternal partner of distress. Until the population of vagabonds and idlers, of workmen without employment, and of the sick and infirm who crowd the cities have been seen to disappear, or other places for recreation or for alleviating the suffering of the poor are found in the various "substitutes for the saloon" ^b the saloon keeper affirms his right to existence. He affirms it brutally by changing prohibition into a reign of uncontrolled liberty and by corrupting all the springs of public life. In one after another of the majority of the cities in which a pretense has been made of imposing prohibition by a law of the State they have managed to evade it and substitute therefor a veritable régime of license. There are but few exceptions to this rule. The most important consists of certain communities in the vicinity of a large city in which saloons are tolerated, such as Cambridge, a town of 91,886 souls, the seat of the celebrated Harvard University, across the river from Boston; Quincy, at the south of the same town, and Hyde Park and Evanston, in the suburbs of Chicago. These are the residence quarters, where business men go at evening to seek calm and repose, far from the dust of the streets, the noise of typewriting machines, and the neighborhood of the outskirts where the workingmen dwell. There they can live their own independent existence and are abundantly able to keep out the saloons. * * *

License system.—Realizing the impossibility in many cases of suppressing the liquor traffic, the majority of the cities and a certain number of rural districts limit their efforts to restraining it; this is the license system.

License, properly speaking, is the right to sell alcoholic liquors under certain restrictions by paying a more or less heavy tax. There is a special license, generally at a low rate, for the wholesale dealers and the bottlers; there is also a greatly reduced one for the druggists who sell alcohols as medicines; we will only take up the case of the retailers.

Among the restrictions in the retail traffic which are universal are: Prohibiting the sale on Sundays, on legal holidays, on election days, after a certain hour at night, to minors, to drunkards or persons recognized as such, and forbidding

^a Unlike England, the United States has very few "temperance hotels."

^b Of all the attempts to create places of honest and attractive recreation for the people in place of the saloon the most interesting are assuredly those which at the same time aim at the moral and mental education of the poorer class, such as the university settlements of Chicago and New York, the "Light House" of Philadelphia, and the various clubs, the chief of which is the Y. M. C. A. and its branches scattered over the entire territory of the Union.

women to keep a saloon or to be employed in one. Sometimes there are more original measures, such as being obliged to remove the screens from before the doors and the windows in order that the drinkers may be seen from the outside, the prohibition of music in the saloons, of billiards, cards, or dice, to the end that only those who are thirsty will go there to drink, but that no extraneous recreation may attract them to the place. Finally, following the same line of thought, several States, to the number of which Pennsylvania was added by a recent law (March, 1903), have prohibited the "free lunch," which serves as a dinner, in the saloons. * * *

But the most active and, to an extent, automatic agent in reducing the number of saloons is the tax paid to the treasury, and which is divided in variable proportions between the city, the county, and the State. A typical and very general example is that furnished by Philadelphia. In 1887, in that city there were 5,773 saloons paying a license of \$50; in 1888, the tax having been raised to \$500, the number fell to 1,746. On the contrary, when the tax was raised from \$500 to \$1,000 in 1891, there was no appreciable reduction. Taking the average of the last twelve years and comparing them with the years previous to 1888, it was found that there was a decrease of 64 per cent in the number of saloons by the simple process of a reasonable increase of the taxes.

The second advantage of high license is raising the moral tone of the saloons which remain. When a seller of alcohol is obliged, besides the \$25 which he must pay to the Federal Treasury, to pay to the city from \$800 to \$1,000 of annual taxation, and when, in addition, he must face the expenses of a luxurious establishment, he must either find some one to provide the funds or simply be the agent of some powerful house, or he himself must be a small capitalist.^a Moral and legal guaranties are increased in any event. Moreover, he must furnish security. But the true reason for the popularity of the high license with the electors is, it must be said, the abundant revenues which are thereby furnished to municipalities, counties, and States. Fortunately, therefore, moral and fiscal interests are here in accord with each other.

The amount of the license tax is a delicate question; if it is made too large, clandestine dealers will multiply and both morality and the treasury will suffer; if it is not large enough, the saloons officially allowed become too numerous and the moral guaranty of their proprietors becomes insufficient. Experience has shown that in the cities a tax according to the population gives the best results, with a maximum rarely more than \$1,000; but there must be no hesitation in carrying this figure higher in cities of more than 200,000 souls, because they are able to supply it.^b Curiously, New York and Chicago do not consider that they are able, on account of their shifting and cosmopolitan population, to levy a license tax equal to that of Boston, New Orleans, Philadelphia, or Pittsburg—towns where the customers of the saloons are more easily regulated.^c

^a More and more are saloon keepers becoming mere agents of the brewers and distillers. The agreement between them is about as follows: The brewer has charge of decorating and carrying on the shop and furnishing the legal security; the saloon keeper binds himself to procure his supplies of beer and whisky from his silent partner, and gives as guaranty for the sums spent in the business his license and lease.

^b At New Orleans the tax amounts to \$1,500, but this excessive figure is only explained by the intention to prohibit the business of saloon keepers to negroes. Moreover, it provokes numerous abuses.

^c At Boston the license is \$1,100; it is \$1,000 at Philadelphia, Pittsburg, and Minneapolis, \$800 at New York, and \$500 at Chicago. It varies generally from about \$500 in towns of from 50,000 to 200,000 inhabitants; \$350 for a population of from 10,000 to 50,000; \$300 between 5,000 and 10,000, and \$200 between 1,200 and 5,000. The minimum is \$100 for villages of less than 1,200 (law of the State of New York).

To the citizen of a country where fees are in proportion to the presumed amount of business this fixing of a uniform tax ^a may appear antidemocratic. It effectually tends to make the small saloons disappear and really promotes a monopoly of those better located.^b The American system is none the less the only practical method of causing an important and rapid reduction in the number of dealers in liquors.

Saloons and politics.—The principle of revoking without indemnity the licenses thus dearly bought, and, it may be added, the progress of prohibition in the rural districts, have led the trade in alcohol to defend itself by organizing its forces on the political field. The increasing concentration of the trade in the hands of powerful brewers' establishments, of which the retailers, nominally licensed, are only the agents, rendered this organization easy.^c Funds were raised by means of levies on the sales of the retailers, and the "rum power," as it is sometimes called, was able to send to Washington during the sessions of Congress an agent charged with "influencing" the members of Congress, who, in the corridors of the Capitol, touched elbows with the W. C. T. U. and the Prohibitionist party. But it was above all in local politics that the saloon keepers took part, where the good will of some candidate for the office of mayor or chief of police was still more important to them than that of members of Congress. That such influence is injurious we have seen; it vitiates and warps the political wheels, corrupts the press, obtains votes for a private interest, and openly pays to public officers the price of their complaisance. That danger called for a remedy; it was found. One of the most remarkable and the most engaging characteristics of the United States is the energetic initiative which is excited by any social vice which it is found necessary to combat. If it is the country of corrupt municipalities, it is also that of societies for public good. The police, compounding with licensed and clandestine saloons, were met by men who had resolutely formed the Law and Order Society, having a private police, which took upon itself the task of personally executing the law. And when the judges go to hold their annual session of the license court there will be seen the curious spectacle of the president of the Law and Order Society holding the seat of the public officer in place of the chief of police, armed with the proper proofs of the violation of the law and demanding the infliction of the penalties.

The task undertaken by the Law and Order Society is a double one; on the one hand it secures the strict observance of the law by the licensed saloon keepers, denounces the violations of which they have been guilty, and at each new application for a license brings to the judges a searching inquiry into the moral standing of the candidate and the reasons for opening a new saloon in the designated quarter.

Its second object is to cause the disappearance of the "speak easies," which are open on Sundays and the days when the licensed saloons close their doors.

^a With the exception of St. Louis, where an ad valorem tax is levied on all the stock in trade of the retailer.

^b In a certain quarter of Philadelphia where there were formerly five saloons there is but one since the operation of high license, but it brings in \$20,000 in place of \$2,000 per year. When the holder retires after having made his fortune he sells out to his successor for from \$5,000 to \$8,000. It is also sometimes asked why a town does not sell the licenses to the highest bidder, in place of granting them at a uniform figure, in order that it may be benefited by the monopoly which it in fact creates, to the profit of a few.

^c The municipalities have vainly endeavored to put brakes on this movement, which they themselves provoked by limiting competition. According to Brook's law (Pennsylvania) the saloon keeper must be the only person individually interested in the business for which the license is demanded and the bonds must not be furnished by the brewers. But how can secret agreements become known?

For this purpose their agents organize expeditions at intervals on Sundays to those places which they have ferreted out, brusquely invade them, and make quick work of the proofs of crime, the casks and bottles, which they store in a safe place while waiting for the constable to come and serve the warrant.

Election days are particularly busy days for the Law and Order Society, and their numerous raids make trouble for more than one political conspiracy hatching in the shade of these by-places.

This open war against illegal competitors would receive the gratitude of the saloon keepers were it not that they themselves are very often the silent partners and source of supply of the clandestine dealers.

But the Law and Order Society does not show itself as a systematic enemy of the saloons. One is even struck, on examining into the published accounts of the court of license, at the moderation with which this society presents its proofs against the occasional delinquents, and the respect which it shows for and the recommendations with which it supports the honest trade in liquors.^a On the other hand, however, it is the irreconcilable enemy of fraud.

It is on the occasions of these raids that the conflicts arise with the police who wish to spare the political friends of the mayor, and the great electors of the party. The police are only called upon to arrest guilty persons when they are caught in flagrante delicto. Sometimes the stroke is so well planned that policemen themselves in uniform are found in the very act of drinking, and in such cases there is no use in calling in others to arrest these. One can understand with what bad humor such a command would be executed, which in certain cases has gone to the length of refusing to bring the police wagon. Recently, in Philadelphia, however, the Law and Order Society and the police have been seen going hand in hand in the repression of gambling in the saloons, such is the prestige which the society has acquired and the powerful assistance which the police themselves render to their collaborators.^b

Such is the renown of this society, even at a distance, that the authorities of a county of Pennsylvania, seeing themselves powerless in securing respect for the law, addressed themselves to the society, and asked them to undertake for a certain sum the moral cleanliness of some of the town centers. The Law and Order Society, having accepted, sent their agents, and in a few weeks 240 saloon keepers were arrested, and 209 of their number proved guilty. The expenses amounted to \$9,000.

Societies of this kind are very numerous in the United States. A large number of them are grouped in a federation under the name of the "Anti-Saloon League," very active, even a little noisy; in connection with their principal mission, which is to watch over the execution of the existing laws, they have also undertaken, under cover of local option, campaigns in favor of prohibition in a great number of rural counties. Their center of action is the State of Ohio, and their orators and missionaries have done wonders through their rallying cry of "The saloon must go!" The Anti-Saloon League supports a delegate at Washington to watch over their interests.

Along the same line are found several prosperous "citizens' leagues." This year the one at Chicago dissolved, the task which they had undertaken seeming to them beyond human power.

^a Sometimes saloon keepers prosecuted by the Law and Order Society have proposed a treaty of peace. They promised, if the prosecution were abandoned, to give a large bond as guarantee that they would observe the law in the future, the retailers' syndicate to be held responsible. This treaty was accepted by the society, which is more desirous of securing respect for the law than of ruining the delinquents. This occurred in Connecticut in 1895. (New York Evening Post, February 5, 1895.)

^b Within a few days 1,200 gambling machines were seized and burned.

Local option.—In the presence of the multiplicity of problems which are presented by prohibition and the license system, we have seen that the majority of the States have taken the wise method of leaving to each community of inhabitants the care of choosing according to their convenience and opinions. This is the principle of local option. It is carried in some cases so far as to permit a community to create a monopoly of the traffic for its own profit.

The law is generally submitted to popular vote by way of referendum, sometimes at regular intervals—every year in Massachusetts, the State always cited as a model for local option—at others when a certain number of voters petition for it, as in Rhode Island. The question raised is generally the following: Shall licenses be granted for the sale of intoxicating liquors throughout the community? They vote yes or no. The communities which vote for prohibition are called “dry;” those which vote for license bear the name of “wet.”^a

In deciding upon the extent of territory to have full privileges of sale there are two rocks to be avoided, both of which are dangerous. The first, as we know, is that of uniting under the same law the inhabitants of centers whose interests and conditions of life are different. This has caused a check to State prohibition. The second, on the contrary, is to allow in a too limited area, and particularly in the same city, the establishment of different systems; for we then see the following phenomenon: “Dry” sections, which are generally those of the rich, drive all the saloons from their midst by their votes into the “wet” sections, where the poor live. Thus, because they have not been able to prevent it, these latter sections become the rendezvous of the vice of the whole city, while all profit equally by the amount of licenses paid into the treasury.^b

The approach of a popular referendum gives birth to a most curious conflict between the partisans and the enemies of prohibition; journals are founded under some very bizarre titles, “The Frozen Truth,” “The Eye Opener,” etc. The fences and even the street cars are covered with placards and proclamations of the temperance leagues and the syndicates of brewers. One remarkable thing, and one which contributes not a little to the credit of local option with good citizens, is that politics are systematically eliminated from the battle, and the committees on license and prohibition make it a point of honor not to favor one party to the detriment of the other. There is, besides, no question of individuals. Such campaigns have a rare educational value. It must, however, be conceded that a good half of the voters, generally assiduous at the ballot box, have no interest in this battle.

There is another variety of local option, strange enough, which is found in the States of Ohio and Iowa. Prohibition is the law of the State, but the saloon keepers have no uneasiness where the majority of voters in the towns of more than 5,000 inhabitants and 65 per cent in the others have signed petitions in their favor. In such cases they are merely subjected to a fine of \$350 in Ohio and \$900 in Iowa. This system is called the “mulet law,” or law of repression. It is quite favorable to prohibition, for, local option having no official standing, it is necessary for the friends of the saloons to have a certain audacity in order to circulate these petitions among the citizens.

Monopoly of the traffic, or the system of dispensaries.—The monopoly of the sale of liquors with an alcoholic base by the State or the county is the third system found in the United States; but the limited area over which it extends

^a Sometimes, as in the State of New York, the question is subdivided. The electors are called to vote on (1) the authorization of the sale of liquors to be drunk at the place; (2) that of selling liquors to be carried away; (3) that of selling alcohol in the drug stores; (4) that of selling in the hotels.

^b These inconveniences did not prevent the city of Boston from adopting last November the principle of votes by wards, after a very heated campaign.

(South Carolina and some counties of North Carolina, Alabama, and Georgia) makes it impossible to draw any general conclusions as to the vitality of the system. * * *

Conclusions.—Now that the time has come to give a résumé of the many impressions which crowd on one in the course of an inquiry into the antialcoholic battle in the United States, it seems that the idea which dominates all the others is that of the diversity and the prodigious activity of the army of temperance. All the moral forces of that country give it assistance. In the first rank are the churches and the schools. Innumerable associations adapted to all beliefs, all tastes, all races, and both sexes have been formed to assist and save the people. Under the pressure of opinion the law has stepped in to consecrate and facilitate the work. After some dangerous oscillations it seems to have found a stable equilibrium by making liquor selling a local question.

Left to themselves the rural communities have to a great extent adopted the absolute prohibition of the traffic, while the urban centers have rallied around the system of regulation and high license as being more adapted to their moral possibilities and fiscal necessities. Raising the license has resulted in a very considerable reduction in the number of saloons. It has resulted in a sort of monopoly created by the law to the profit of a small number, which was afterwards to be revoked on the first misbehavior of the beneficiaries, to the greater profit of law and order. Where the police have sometimes failed in their duty societies of citizens have been organized with a private police for the purpose of taking the execution of the law into their own hands.

There are finally to be noted the attempts at creating here and there a legal monopoly, either through a high-priced system or by a system of reserving the wholesale trade to the State. The future will show whether from a moral or financial standpoint these experiments have proved successful.

The results of so vigorous a campaign have not been long deferred, for while men have fought social forces have prepared the victory for them. The progress of agriculture, industry, and trade emphasizes with its demands the exhortations of the apostles of temperance, reserving its benefits for those who listen and destroying those who rebel.

The era of uninterrupted prosperity which began ten years ago in that country, raising salaries, improving conditions, and ennobling the aspirations of life, as well as giving birth to innumerable institutions for the public benefit, must not be forgotten among the principal factors of temperance. If it be true that prosperity is a result of temperance it also gives rise to it. The comforts of life dissipate the social attractions of the saloon, while better food renders the use of alcohol as a stimulant unnecessary. The future will see this work still better organized and more widely extended.

Through one of those providential dispensations which are the recompense of excessive efforts for good, the battle for total abstinence has resulted in the triumph of a true moderation. The Federal statistics of the Internal Revenue Office show that since 1840 hygienic drinks and particularly beer have been substituted for alcohol.^a

Is this to say that the antialcoholic war is no longer an object in the United States? To assert this would be to misunderstand the character of intemperance, which always rises again after a defeat; it would be particularly false in a country where hundreds of thousands of immigrants land each year. Moreover, statistics show that since 1896 there has been a slight recrudescence in

^a In 1848 there were consumed $2\frac{1}{2}$ gallons of whisky per capita, in 1901 only 1.33, while the consumption of beer in the same time increased from 1.36 to 16.20, the quantity of pure alcohol consumed being below its former level.

the consumption of spirituous liquors, which seems to concur with a certain slackening of the zeal of the apostles of temperance after their first period of success.^a The work is not finished, but the method appears good and the example is worth following. It is encouraging to other countries. Sixty years ago America was in a worse condition than we are in to-day; with her climate, her race, and her political corruption, she has yet to triumph over many more obstacles; by persevering energy she has been able to reach her goal. With the moral and social forces at the disposal of our country, the victory would only depend on the union of good and willing spirits.

TEMPERANCE INSTRUCTION IN PRUSSIA.

[The minister of worship, education, and medical affairs of Prussia, Dr. Conrad von Studt, published in the September number of the official organ of his department of education ^b a brief guide in temperance instruction for teachers of elementary and secondary schools. This guide is not a course of study, but merely gives the main points which the minister desires to see impressed upon the pupils and students. Two months later he published a German translation of a detailed American course of study in physiology and hygiene, a course which bears the superscription, "Approved by the department of scientific temperance instruction of the World's and National Woman's Christian Temperance Union." Of this specialized course the minister says that it is not to be taken as a type for courses in Prussia, but that it contains many hints for practical lessons. With reference to the dangers arising from the use of intoxicants, he points to his own order, which, he says, contains all that should be taught in the schools of Prussia on the subject. Since it is of interest to note how the Prussian authorities limit the instruction in temperance physiology, an English translation of his order is here given.]

THE INJURIOUS EFFECTS OF IMMODERATE INDULGENCE IN SPIRITUOUS BEVERAGES.

BRIEF GUIDE FOR INSTRUCTION IN THE ELEMENTARY AND SECONDARY SCHOOLS OF PRUSSIA.

Alcohol, in German also called spirits (*Spiritus*) and wine spirits (*Weingeist*), is made by means of fermentation directly from cane or fruit sugar, or indirectly from potato starch, from all kinds of grain, and from leguminous plants.

All drinks produced through fermentation contain alcohol. To these belong all kinds of beer, from the simplest home brew to porter and ale; all pure fruit wines, brandies, and cordials; also eau de cologne, and mint or Carmelite spirits, which consist of a mixture of alcohol and other ingredients.

Beverages made by fermentation directly from natural products (such as common brandies, wines, beers, and home-made fruit wines), or by mixing alco-

^a From 1896 to 1901 the consumption of distilled liquors per capita shows an uninterrupted advance.

Year.	Gallons.	Year.	Gallons.
1896	1.00	1899	1.15
1897	1.61	1900	1.27
1898	1.10	1901	1.33

^b Zentralblatt fuer die gesamte Unterrichts-Verwaltung, 1903.

hol with water and other fluids, contain alcohol in different proportions. Among the mixtures are found many so-called fruit wines and artificial wines, especially also the cider used in the eastern provinces of Prussia, which is a mixture of freshly pressed apple juice with water, sugar, and about 16 per cent of alcohol (by volume). In the eastern provinces people also drink ether and ether mixed with alcohol (so-called Hoffmann's drops).

The lightest beers contain less than 2 per cent, the heaviest (porter and ale) up to 6 per cent of alcohol; wine of grapes and home-made fruit wines produced by fermentation contain from 6 to 20 per cent; brandies and cordials, eau de cologne, mint spirits, and Carmelite spirits from 30 to 70 per cent of alcohol, while artificial fruit wines, such as apple, currant, gooseberry, and pear wines, and especially cider, contain from 4 to 16 per cent of alcohol, according as sugar is added or alcohol directly mixed in.

Alcohol is a compound of carbon, hydrogen, and oxygen, and appears, according to the natural product from which it is derived, in different combinations as ethyl alcohol, amyl alcohol, propyl alcohol, etc. With the exception of ethyl alcohol, all alcohols are commonly called fusel oil.

The alcohol in a beverage gives to it an animating and, under certain conditions, a desirable beneficial effect, but if present to excess its effects are injurious.

Taken to excess or habitually, alcohol injures (1) the health, (2) ethical conduct, (3) family life, (4) the economy of the family, and (5) the economy of the state.

1. Injuries to health.

Taken in small doses alcohol acts at first as a stimulant and puts the user into a pleasant mood. During the condition of exhilaration it often dispels his worries and sorrows and enables him momentarily to increase his labor power; but it would be an error to believe that mental or physical powers, as well as the ability to work and perform duties, could be increased definitely by habitual use of alcohol.

After every excitation of the nervous system by means of alcoholic drinks follows a condition of relaxation and exhaustion, just as it follows every other nervous excitation. The normal human being can without using stimulants work mentally and physically without interruption to a much higher limit than the one who resorts to stimulants. This has been demonstrated by the soldiers in the American and English armies, who abstain from stimulants entirely. It has further been proved by the example of athletes (bicyclists, oarsmen, gymnasts, and swimmers), and finally by Nansen upon his north-pole expedition. Everyone can test the foregoing statement by careful observation of himself.

Taken in small doses, and not taken habitually, alcohol will, as a rule, not injure the health of adults. A dose which will not, as a rule, be injurious may be considered to be 30 cubic centimeters a day; that is, about as much as is contained in one liter of Bavarian beer, or in half a bottle of light wine, or in a wineglass of brandy.

Owing to the great differences in individual conditions of human life such a measure can not be considered absolutely valid for all. Young people, or those whose nervous system is not quite normally developed, and especially all who have been weakened by disease or injuries, may endanger their health severely by taking the quantity suggested in the foregoing paragraph. If, on the other hand, persons can stand for a limited period of time larger quantities of alcoholic beverages apparently without special injury, it must not be presumed that they can do so in the long run without injurious effect.

Only total abstinence in children and strict temperance and avoidance of excesses in adults and youths will prevent injuries to health.

He who neglects these precautions will experience, sooner or later, the exhaustion following upon excitation of the nervous system by the use of alcohol. The perceptive powers decrease, mental elasticity relaxes, physical and mental fatigue takes place after only a moderate indulgence in alcoholic drink.

Habitual use of alcohol leads to dyspepsia, which manifests itself in want of appetite and in insufficient digestion of the food taken; frequently in irregularities of the bowels, constipation, or diarrhea. These disturbances are the more noticeable the less the drinker takes wholesome, solid food.

The desire to take food is diminished through the use of brandy and strong liquors sooner than through the use of other alcoholic beverages. Strong alcoholic liquors have been held to be economical, owing to their effect upon the quantity of food taken. But this is quite as erroneous as the assumption that alcoholic drinks promote digestion. They are not foods [Nahrungsmittel], as was formerly assumed, but almost exclusively means of stimulation and excitation.

This is true, also, of wine of grapes if taken habitually, even though it be perfectly pure, and all the more so the greater the quantity of alcohol it contains.

The so-called "Bavarian beer," it is true, has a small nutritive value, but it will nevertheless injure the health not only through the alcohol it contains, but also through the large quantities in which it is drunk. The great quantity of fluid taken overfills the vascular system of the body; the heart, in order to overcome this superabundance, is obliged to work harder; a consequence of this is, that the muscles of the heart, like all hard-working muscles, increase in bulk. But side by side with muscular substance fat is generated, and thus we see developed the so-called "beer heart." It is a heart which, despite its enlargement, is degenerated and weakened, not capable of performing the increased work demanded of it by the beer drinker, nor equal to other efforts for any protracted period; it fails to do its work, and the man dies of paralysis of the heart or heart failure. In Germany, especially in Bavaria, a large number of men die in consequence of this immoderate senseless beer drinking. The superfluous fluids must be secreted from the vascular system through the kidneys; this overburdens the kidneys and affects them also; in addition to the beer heart, an enlargement of the kidneys takes place at first, which, in the course of time, turns into shriveling and causes a decrease of the kidneys, which diminishes the capacity of the organ to perform its functions, and leads to further severe effects and long-protracted sickness, and even to death.

The formation of fat is essentially favored by beer drinking; corpulence appears, and a growth of fatty substance in the body takes place. In persons addicted to liquor and beer drinking, also in wine drinkers, a disease of the liver is developed, the so-called "cirrhosis," which beginning with an enlargement of the liver later turns into shriveling through the growth of fibrous tissues.

The injurious effects of excessive or long-continued use of alcohol upon the health take very different forms in different individuals.

Healthy strong adults can apparently withstand the effects of alcoholic drinks over and above the permissible quantity for a certain time without injury to their health; but in most cases, even with vigorous constitutions, immoderation has its revenge by abbreviating the usual duration of life.

Habitual drinkers, according to experience, are an easy prey to contagious diseases (cholera, typhoid fever, etc.), also to pneumonia. Chronic diseases, especially tuberculosis, are aided in their destructive effects upon the body. All

persons afflicted with such ailments should abstain wholly from the use of alcoholic drinks, unless their physicians, in exceptional cases, prescribe them.

For children under 14 years, and for enfeebled persons, alcoholic drinks are very dangerous; they act like poison, and should therefore not be taken by them under any circumstances.

Since alcohol affects above all the nervous system, it is obvious that the development of nervous diseases, hypochondria, neurasthenia, is favored by long-continued or immoderate use of alcoholic drinks, and that a special predisposition to these diseases is induced; also that mental derangements, caused by immoderate use of alcohol, are not rare. According to reliable observations, one-fourth of the inmates of Prussian insane asylums in 1899 were notorious drinkers.

Only a few figures may be given here:

In 1899 alcoholism was proved (*a*) in public hospitals in 13,610 male patients and 776 female patients, or in a total of 14,386 patients; (*b*) in insane asylums in 6,259 males and 716 females, or in a total of 6,975 inmates.

Taking the two kinds of institutions together there were 19,869 males and 1,492 females, or a total of 21,361 persons suffering from the effects of alcohol. In 6,104 males and 410 females (total 6,514) alcoholism was assigned as the exclusive cause of the disorders.

Among the 6,975 inmates of insane asylums suffering from the consequences of alcoholism (9.6 per cent of all the inmates of such asylums) 5,388, or 77.3 per cent, were afflicted with strongly pronounced mental derangements. Of 1,987 drinkers admitted to these asylums 28.5 per cent had come into conflict with the law.

According to the same sources of information diseases caused by alcoholic indulgence have increased materially since 1886. There were admitted to asylums for the insane and to public hospitals, at the dates given, the following number of persons suffering from alcoholism (Alkoholisten):

	1886-1888.	1889-1891.	1892-1894.	1895-1897.
In Prussia	31,782	31,095	32,664	36,683
In the German Empire	39,202	36,874	40,190	46,042

While in the one year 1899, in Prussia alone, 21,361 "alcoholists" were assigned to institutions of both kinds.

Not only drinkers themselves are in danger of becoming mentally diseased, but also their children, for as many as 20 per cent of the children of drinkers are weak-minded, idiotic, or epileptic.

2. Moral deterioration.

Upon immoderate use of alcoholic drinks follows intoxication. Intoxication, by befogging the senses and injuring judgment, reasoning, and observation, leads to imprudence, and through this to all kinds of follies, misdemeanors, transgressions, and crimes. Wanton tricks of young people degenerate into roughness, and not infrequently lead to regrettable destruction of property (as tearing down business signs, pulling out doorbell ropes, etc.).

Experience shows that persons in a state of intoxication may do violence to public officials as well as to private persons, that their sense of shame is blunted, and that they may commit immoral assaults upon women and children. Many a student has made, while intoxicated, his first false step in sexual matters, from the consequences of which he suffers all through life, and often infects even his wife and children.

Intoxication often leads to quarrels, which, from mere wordy disputes, turn into blows, and subsequently lead to lamentable duels, to which many a young life falls a victim.

For all these reasons everyone should beware of the first intoxication; the first is mostly soon followed by a second, and in this way the round of days of intoxication is begun.

On these days occur more frequently than on other days mishaps during work in all, especially in dangerous, industries; also a disinclination to bodily as well as mental labor, consequences which are particularly noticeable after Sundays and holidays, and which give rise to the so-called "blue Monday."

What an important part the immoderate use of alcoholic drinks has in producing demoralization is shown by the number of drinkers committed to jail.

According to reliable statistics, in Prussia, in 49 penitentiaries and 32 jails for men, in 18 penitentiaries and jails for women, and in 21 houses of correction for both sexes, 43.9 per cent of the 30,041 male prisoners and 18.1 per cent of the 2,796 female prisoners were addicted to drink. Most of their criminal actions had, as evidence showed, been committed on Sunday or Monday.

3 and 4. Injuries to family life and to the economy of the family.

Poverty does not lead to the use of liquor, but liquor leads to poverty. The diligent laborer, the well-bred man, wishes for his comfort a clean dwelling, an orderly conducted household, a faithful spouse, and solicitous mother for his children. To reach this end, i. e., a comfortable home, the wages earned by the man are of decisive importance, as is his moral example for the education of his children. In both directions it will prove to be a great detriment if a large portion of his wages is sacrificed for strong liquor and other alcoholic drinks and consumed in disorderly, wasteful living. These lamentable consequences, alas, are easily detected in the modern habits of life of a part of the population in numerous places and families.

It is easily proved that wage laborers too often spend as much as one-third of their well-earned wages on pay day in the liquor shops. Wives and children often follow the example of the father. Such a life undermines family happiness, leads to disorder in the household economy, and not infrequently to complete collapse of the domestic housekeeping. Disordered conditions of family life are increasing. The husband does not receive sufficient food, because his money has been wasted in liquor; the wife loses the desire to attend to domestic order. The marriage tie is loosened, discord and strife break out, the liquor bottle is brought into the house, and the evil example of the parents endangers the education of the children and their whole future. To such a sad result another circumstance abundantly contributes, namely, that the unmarried laborer can find no other shelter for entertainment and edification than the saloon, the beer house, or some other retreat where he is obliged to pay for his stay by buying alcoholic beverages. Places of entertainment or recreation that do not require this "alcoholic admission tax" are very rare in the German Empire.

Lodging accommodations for unmarried people are often so narrow and insufficient that relaxation and recreation from daily toil can not be had in bedrooms. Habituated to this mode of life, the workman enters into wedlock. No wonder that he soon looks up his old drink companions, spends his hard-earned money in brandy or beer, and thus the household (which has only been established after great trouble and often with borrowed money) is deprived of it. Bad domestic conditions lead the drinker, as experience shows, in many cases to committing punishable acts (against property, public order, etc.).

5. Injuries to the economy of the state.

Injuries to the health through immoderate use of alcohol, if it be not curbed, will diminish the defensive power of a country.

To that is added the financial damage to the state. In the German Empire there are spent every year about three thousand million marks (about \$750,000,000) for alcoholic liquors. What injury, what an amount of grief and misery, is caused through this wasteful expenditure for superfluous, unhygienic, and demoralizing means of enjoyment! How much good, on the other hand, could be done by using these enormous means for individuals and the commonwealth.

If the injuries are extended over a large number of families, the moral and economic life of a town must suffer. That the taxing strength is diminished thereby, and the whole economy of the state is injured, goes without saying. This consideration demands urgently that the state should intercede with a firm hand to curb the immoderate use of alcohol. This is done most effectively by the method of prevention, if the great hygienic, moral, and economic injuries arising from the use of alcohol are pointed out to the young.

It will be especially a matter for teachers in elementary and secondary schools to take part in combating drunkenness, and to instruct their pupils (in a manner suitable to their comprehension) concerning the evil consequences of the immoderate use of alcohol, and solemnly and emphatically keep before their eyes the dangers lurking in alcoholic drinks.

REPORT ON TEMPERANCE INSTRUCTION IN WESTERN MASSACHUSETTS.^a

[By G. T. FLETCHER, Agent of the Massachusetts State Board of Education.]

Required temperance instruction has brought the study of physiology into most of our schools. While some text-books and the plans of work may not be best adapted in all cases to meet existing conditions and to secure desired results, much good to children and to the community has been achieved.

The following circular letter was sent to superintendents of schools in western Massachusetts:

NORTHAMPTON, MASS., *January 25, 1904.*

To the Superintendent of Schools:

To what extent as to time and material and by what methods do individual teachers in your schools present physiology, hygiene, and temperance instruction to pupils?

An early reply will oblige,

Yours, truly,

G. T. FLETCHER.

A few complete statements from individuals, quite fully covering the ground of the questions, are given. Other replies are combined and condensed to indicate opinions and methods.

The subject is taught in all grades of the elementary schools and in connection with biology in the high school. It is taught for the last two months of the school year, and during these months a daily lesson is given. The actual length of the lesson depends on the age of the pupils. In the middle and upper grammar grades the lesson is usually from half an hour to forty minutes; in the primary and lower grades it is often not more than twenty minutes. We emphasize hygiene especially, and due emphasis is laid also on the effects of narcotics and alcohol. We do less in anatomy and also in physiology than was done some years ago. My own impression is that we are doing still more

^a 67 Mass. Rep. (1902-3), 212-215.

in these two phases of the subject than ought to be done. It seems to me that nearly all the time devoted to the subject of so-called "physiology" should be given to hygiene, which necessarily includes the discussion of the effects of alcohol and narcotics. No more physiology and anatomy should be taught than is absolutely necessary to make the instruction in hygiene rational.

The instruction to our teachers in the grades calls for an oral lesson once a week in all grades but the sixth, where the subject is studied daily through the year, the recitation period being about twenty minutes. A text-book is used in the sixth grade and in some of the other grades. I do not know that the methods in this subject differ from the methods used in teaching other similar subjects. The experiments suggested by the text-book are presumably made for the benefit of the class, and an effort is made to secure effective work and permanent results. In fact, the subject is treated in essentially the same way as other subjects which are not classed with arithmetic, reading, spelling, geography, and language. We give more time to physiology than we give to civil government in the grades, and about one-third of the time we give to history. Of course due attention is given to the effects of stimulants and narcotics.

As to time: In grades I-V, one recitation period a week; grades VI-IX, about two recitations a week. Generally in the higher grades instruction is not given throughout the year, in which case there is solid work throughout the spring term, a recitation daily.

As to material: How to Keep Well is used in intermediate grades, and Conn's Physiology and Hygiene in the eighth and ninth grades; we use the Pathfinder series in the fourth and fifth grades; Blaisdell's How to Keep Well in the fifth and sixth grades; Blaisdell's Our Bodies, and How We Live, in the seventh and eighth grades; and Martin's Human Body in the ninth grade and high school.

As to method: Little is done in the primary grades that could be called more than health talks. Most of the instruction is oral up to the sixth grade. Pupils are supplied with books from the fourth or fifth grades up.

The teachers are instructed to give one lesson in temperance physiology each week. These lessons are given by the teacher in the form of talks, except in the ninth grade, where it is made a regular study. The normal teachers have material that they have used in the normal school.

In one town we take up the study of physiology in the ninth grade in a very thorough way. In the other grades we take it up during the winter term, using topics that I assign. These lessons are given by the teacher. We have tried using a book, but I think it is the unanimous opinion of the teachers that they can get better results by taking topics in the form of talks. We employ none but normal or college graduates in this town, the largest in my district, and all these have material that they are familiar with and can present in a more interesting way than they could from a text-book.

We give the equivalent of one period each week in each grade to this subject. It is not always the case that it is taken by weekly periods; it sometimes seems better to give it consecutively, allowing it to take the place of some other subject for the time being. I find that the teachers vary in their ability to keep the interest of the pupils if several days pass between the successive periods of study in this subject.

This work is supplemented by the teacher according to her spirit and enthusiasm. The work indicated is the minimum. The results vary in different schools, and under various conditions in the same schools.

The materials for illustrating the subject are very limited in addition to the text-books. We use the New Century physiologies, and find them well adapted to our needs.

Grades I to IV.—One lesson a week. General lessons on the care and cleanliness of the hands, face, hair, and body. Lessons on eating, drinking, breathing, and sleeping, with reference to the formation of right habits and self-control. Simple talks on the senses, and what we learn through them. Parts of the body, their uses and care. Special lessons on the care of the teeth and nails. Teach "temperance in all things." Temperance implies self-control, obedience to the law, to right feeling, and right living.

In the schools of this district physiology is taught incidentally in grades up to and including the fifth. The instruction is along the lines of personal cleanliness, decency, and morality. In grades VI, VII, and VIII we use Colton's Ele-

mentary Physiology as the basis of our work, and complete it in the three years.

Directions are sent to teachers, suggesting materials and methods.

Teachers are expected to give lessons weekly to all grades, the time varying from fifteen minutes to thirty.

We give two periods a week to the study in all grades above the first or second, depending upon the classes. No books are used below the fourth grade.

We put special stress upon such things as teach care of the body, cleanliness, temperance in eating, drinking, thinking, speaking, doing.

In all grades excepting the very lowest time is given to a consideration of the effects of narcotics and stimulants.

Our teachers take hold of the work with interest and common-sense methods.

Some teachers are interested in the subject and get good results; others do not like to teach it.

The general tendency seems to be toward oral instruction and the use of some reading matter treating of hygiene and temperance in the lower grades, with considerable use of books in the upper grades. The time element varies in different schools and with different teachers. The opinion is held that too much or too little time may be given to the topic to secure the best results. Interest must be maintained. The salient points of temperance instruction should be emphasized in some way during each year of school life, that they may make a lasting impression for good.

Superintendents and teachers generally manifest an interest in temperance instruction. Not all think alike regarding a method, and a few seem to lack confidence in the educational value of the instruction or are in doubt regarding the best method. Good has evidently been accomplished.

CHAPTER VIII.

NOTICES OF SOME EARLY ENGLISH WRITERS ON EDUCATION, 1578-1603.^a

WITH DESCRIPTIONS, EXTRACTS, AND NOTES.

By PROF. FOSTER WATSON,
Of University College, Aberystwyth, Wales.

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^a Notices of English writers on education, preceding in point of time those here treated, have appeared in previous Reports of the Commissioner as follows: Report of 1901, Vol. I, chap. 17 (pp. 861-884); Report of 1902, Vol. I, chap. 10 (pp. 481-508); Report of 1903, Vol. I, chap. 6 (pp. 319-350).

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JOHN STOCKWOOD.

1578.

*A Sermon Preached at Pauls Crosse on Barthelmew Day, being the 24 of August 1578, Wherein, besides many other profitable matters meet for all Christians to follow, is at large proved, that it is the part of those that are fathers, householders, and Scholemaisters, to instruct all those under their government, in the word and knowledge of the Lorde. By John Stockwood, Scholemaister of Tunbridge * * * Lond. 1578. 12mo.*

From the dedication to the Worshipful Company of Skinners in London the following passage is taken :

Now concerning my purpose of offering this my simple labour and travail such as it is, unto your worships' favourable acceptation, there may be many causes and reasons moving me thereunto, but chiefly that this way I might leave unto the world a testimony of a dutiful and thankful mind for your Free School of Tunbridge, honourably founded by that worthy Knight Sir Andrew Judd, sometime Lord Mayor of your famous City of London, and worshipfully and liberally to your great costs and charges maintained against the bad attempts of those that went about to have made it their own private possession, which fact of him, the honourable founder and you the worthy maintainers and defenders, I trust the L. will use as good examples, to move others to do the like, for the training up of youth in the fear of God.

Schoolmasters and religious teaching.

But because I am thus far entered into this large and fruitful field of children's education and household government, of fathers and householders generally neglected, whilst where they should daily and continually teach their chil-

dren and families out of the word of the Lord to fear him, many of them daily and nightly are occupied in Dicing, Carding and Gaming, and yet must needs be counted Protestants. Give me leave, I beseech you a little to direct my speech unto those, whom in respect of their office it chiefly concerneth, to bring up youth, I mean schoolmasters. For among all the diseases that these our days and times are grievously sick withal, there is none wherewith they are either more generally or more dangerously infected, than with this, that the most part of schoolmasters, like as fathers and householders, think it no part of their duty to meddle with instructing their scholars and pupils in the word of the Lord and principles of Christian religion.

A ring of gold in a swine's snout.

Whereas without the fear of the Lord, there is no wisdom, neither is it possible for youth to go well forward in virtue and good manners, things as necessary as learning, which, without these, is but a ring of gold in a swine's snout, if they be not trained up in the knowledge of the word. * * * Hearken, hearken all you that be Schoolmasters, there is no other means to have your youth to profit in virtue and godliness, but by taking heed to the word of the Lord.

Youths to be godly as well as learned.

And what parent is he that setteth his son to school, but that he would have him as well godly as learned? as well a virtuous child as a toward scholar? as well instructed unto salvation as furthered in profane learning? For if there be any that have other ends in putting their children to school, these being condemned, your schools were better to be without them, than cumbered with them. From whence come the general complaints of the ungraciousness and unhappiness of scholars but from this, that you never teach them their duties out of the book of the Lord?

Methods of over-much gentleness and over-much flogging.

Some of you think over-much gentleness to be the way, and others continual and tyrannical scourging and whipping to be the way, whereas indeed you are both sorts far and wide out of the way. For the one with too much lenity encourageth them to a lewd licentiousness and looseness of manners: the others thinking by cruel and butcherly beating to win reformation, engender in them such a mislike and loathing of learning that they abhor with as deadly hatred the school-house, as we do those things which are most loathsome and noisome unto us. I like well of gentleness, if it be such as by it manners be not corrupted and spilled, and on the other side I allow of reasonable correction, so as it be used as the last remedy, that is, when no other will serve. But the first, the best and the chiefest way, is to begin with teaching your youth the fear of the Lord. For that is, as Solomon saith, the beginning of wisdom.

Children and religion.

But you fear peradventure that it should be to little profit to speak unto children, of religion. I hear you, and think of that you say, as a cloak to hide your fault and cover for your slothfulness, rather than a true cause to stay this duty. He that hath said, Suffer little children to come unto me and forbid them not, for unto such belongeth the kingdom of heaven, will no doubt bless your labours, taken in hand in his fear. Begin therefore at length and try: you shall I warrant you, to your comfort, see your youth profit in virtue and godliness.

Religion and the profane authors.

I would have you that, setting aside all care of religion in your schools, do make it your only profession to read them profane authors, show me the example but of one person, whom, either Tully his Offices, or Aristotle his Ethics, or Plato his Precepts of Manners, ever yet made a godly and a virtuous man. I am not against the teaching of profane writers: I know they have their use. But I utterly mislike your preposterous, backward, and earthward care in labouring chiefly about these, omitting that which should be foremost, namely instruction out of the word. Take heed that in respect ye worthily run not into the reprehension that our saviour Christ useth towards the Scribes and Pharisees, for touching mint and annis and cummin, and leaving the weighty matters of the law, as judgment, mercy and fidelity: that is, for taking much pains about trifles, and dealing slenderly and slightly in matters of great importance. Let the name of God and of his Christ be heard often in your schools: let it be familiar unto your scholars by continual beating it into their heads.

What though it enter but softly, the water by often dropping pierceth into the hard stone: by much heating the strong iron is made soft; by often putting into the fire the toughest steel is made pliant * * * The soft wax will receive any print, whereas the hard will take none; young sciences [scions (?)] will be bowed, which way you will have them, whereas the grown trees will rather break than bend. Look what liquor a vessel is seasoned withal, when it is new, it will keep a snack thereof when it is old. And teach a child while he is young what ways he shall walk, and he will not forget it when he cometh unto years.

Popish schoolmasters.

This thing do the papists of our time full well understand. And therefore have their picked schoolmasters privately to noisil up their children in their houses in the Pope's religion, that they may taste and smell thereof when their parents be dead and rotten. And great pity it is, that the Queen's enemies should be permitted such liberty. For by this means are many toward gentlemen otherwise, utterly marred and spoiled.

The instilling of popery: Stockwood's view.

How (I pray you) falleth it out, that you have at this day in this land, many young gentlemen not above 24 years old at the most, that are more obstinate and stubborn papists than their fathers: they will come at no Church, at no Sermons, whereas their parents will do both. And if at any time there be process out for them from her Majesty's high Commissioners, they find one means or other to have inkling of it, and then forsooth they must in post, over into France to learn the language, whereas indeed their voyage is not so much to learn the French tongue, as to withdraw themselves from punishment of law, and there at liberty to hear (when they please) a Latin mass. And for my part I wish that all the papists in England (without they repent) together with all the rest of her Majesty's enemies, were in France or some other place of banishment, without hope ever to return again, and so should our country be in more quiet and safety. But of this that I have said it evidently appeareth, that whereas in respect of their years, being not past 24 years they were at the beginning of the prince's reign capable of no religion, and now be stiff-necked papists, it cannot be chosen, but they must have it by the education of popish schoolmasters or popish parents or both together. And no marvel.

The "broom" of the universities, and "the sweepings."

For we have in many gentlemen's houses, and also in the houses of others in the country of higher calling, the sweepings of the universities, I mean, such rotten papists as by the broom of godly discipline, as unprofitable dust, have been swept out thence, are entertained in the country in private houses to teach their children. And then they be as safe as the fox in his borrow. For who dare be so bold as once to enquire wherein they instruct their scholars? Besides this, they are huddled together, old popish persecuting Mass Priests, in some houses four, in some three, in some two, in some one, and they (forsooth) under pretence of serving in several offices, as some stewards, some Caters, and so forth, pervert whole families. For can it possibly be otherwise, that themselves papists, and under papists, having the government of youth, as men chosen for the purpose, should teach any other than papistry?

The education of the children of Papists.

I wish that the children of our papists, so soon as they be capable of learning, might be taken from them (they notwithstanding paying for their education) and be committed unto the government of godly teachers, that would learn them the fear of the Lord: or if their education be permitted to be in the houses of their parents, that order may be taken, that none have the teaching of them, but such as be well known to be zealous in religion: for these papists howsoever they pretend love, they do indeed kill: howsoever they would seem to cherish, they do indeed corrupt and spill.

Stockwood's request to the high commissioners.

Wherefore I earnestly pray the honourable and worshipful of her Majesty's High Commission, to cause private popish teachers, to be sought after and sifted, as well to stay the present mischief, as also to meet with before hand, the hurt that may, by suffering them, grow hereafter. And to end this matter (in which albeit I have been long, I hope the necessity and profit of it shall easily with the godly procure my pardon) I likewise heartily desire all teachers of youth,

not to suffer themselves to be found less diligent in a good cause, than the papists in a bad * * *; not to be less mindful to teach the scholars the true religion than the papists to learn theirs the false.

1590.

A plaine and easie Laying open of the Meaning and understanding of the Rules of Construction in the English Accidence, appointed by authoritie to be taught in all Schooles of his Majesties dominions, for the great use and benefit of young beginners. By John Stockwood, sometime Schoolmaster of Tunbridge. Imprinted at London by the Assignes of Francis Flower. 1590. 8vo. (86 pp.)

On the back of the title-page is :

THE BOOK TO THE YOUNG PUNIES AND PETITS OF THE GRAMMAR SCHOOL.

When painful Master hath no time
In plainest sort your rules to teach,
Or clubbish fellows shall refuse,
Their friendly help herein to reach :
Because you come with empty hand,
And proffer not thrice welcome fee,
(Which thing some scholars much desire)
Then boldly make resort to me.
I will you help, make proof who list,
And set you down the easy way,
Your English rules to understand,
Their meaning open for to lay.
For each example to his rule,
I teach you aptly how to fit:
Thus may you laugh, where others cry,
When up they go for missing it.
Now, as for fee I none do crave,
I ask no other recompence,
The plan is mine, the profit thine,
Using this book with diligence.

In the Epistle Dedicatory to Master William Lewin, doctor of both laws, justice of the peace, and a high commissioner, Stockwood says :

If it shall of any be laid unto me for a fault, that I spend time in these small trifles, and Grammar matters, the which might better be employed about things more serious and of greater moment and importance, my defence is, that to have laid well the groundwork, and as it were, the foundation, whereupon the whole frame and building in a manner of the Latin tongue must be settled, is not in deed and in truth, to be deemed a light and toyish matter, but that shall bring great ease unto the master, and also good furtherance unto the young beginners, if with diligence and heedfulness they look unto the same.

He then quaintly adds :

Besides that I know not how it cometh to pass that as *Navita de stellis, de bobus narrat arator*, and every one as he hath been brought up, delighteth to be talking of those things for the most part wherein he hath been most exercised : so I having spent many years about the instructing of youth in the principles and rudiments of the Latin tongue, cannot choose but ever now and then be harping on those matters, with the which in former times I have been so long and well acquainted. If any benefit may grow thereby unto those little ones, for whose sake, as well to save them from the rod, as also to encourage them by this plain laying open of the meaning of their rules, with more willingness, and cheerfulness to go forward in their studies : I shall have obtained my desire. * * *

In an address *To the friendly Reader concerning the profit of this book*, Stockwood further writes :

Not being altogether ignorant (right gentle Reader) of the slender capacity of many young beginners in the Grammar Schools, having myself by the space of twenty years exercised the office of a poor Schoolmaster, during the which time I have had the trial of many wits, and finding by experience, that one and the selfsame thing being often repeated in teaching, and as it were by small drops instilled into the tender ears of the little Punies and Petits : yet by reason of the weakness of their wits in those young years, it hath quickly passed away without any great profit, I have wished many times, that some good

body would take pains for to lay open the rules of construction in our English accidence, in such a plain and ready manner, as that the little ones, might as it were by themselves easily conceive of the meaning of the same, by the apt applying of every example unto his several rule. For this being well performed, a ready way is opened to the more easy parsing through the examining and parsing of such lectures, as their teachers afterwards shall think good to read unto them.

Stockwood's "vacation time."

Which labour, because none hitherto hath entered upon, I myself in the vacation time of the twelve days (as they call it) have taken upon me, and with God his help finished the same.

Why this labour hath been taken in the English rules.

And I have the rather made choice to deal with the English rules, because it is the first thing that the Accidentiaries do enter into, after they have learned their eight parts of speech, and as it were the foundation of all the rest of the Grammar building, the which being well laid, they shall be the better able to proceed to the understanding of Latin Authors. And forasmuch as there lieth a great weight in the manner of teaching the young beginners the understanding of these rules, which is chiefly to be attained by letting them familiarly and plainly see, how every example agreeth with his rule, I hope that I shall have in such sort performed this point, as that the child of meanest conceit, if he diligently read and mark this book, may almost without any help of his master, be able of himself, by the example, to show the meaning of every rule to every one that shall demand the meaning of the same.

Pains spared to the schoolmaster. Ease to the scholar.

The Schoolmaster then shall by this book be eased of much pains, that he was forced to use before to little purpose, because that the sound of his words striking their ears for the time, was straightways forgotten: and the scholar that carrying away many a stripe for his dulness and forgetfulness was much discouraged, and not daring for fear to ask his master again the thing which he told him twenty times before, may resort hither, and without any blows hear again and again the same thing even so often as he list, the which neither time nor tediousness will suffer his master to repeat unto him.

The use of the book to fathers.

Yea every loving and careful father for the profit of his son, the which hath sometimes in his youth been a smatterer in Grammar, and now through continuance of time, and other business almost clean forgotten the same, by using this book, and questioning at spare times with his child, when he cometh from the Grammar School, may partly increase his forlorn knowledge, and partly help forward by his riper wit, the tender understanding of his little child, and perceive how he profiteth, so far forth as concerneth the conceiving of the meaning of every rule, by applying every example unto the same, to which purpose I dare boldly pronounce, that nothing is omitted, that any way concerneth the fitting of every example to every rule throughout the whole rules of construction, having framed myself to be as it were dunstically plain, for the better understanding of the young ones, *unto whom nothing can be made too plain.* * * *

Stockwood proceeds to point out that his book will "further the sale of the English Accidence" and that it will easily be seen to be advantageous to have the two bound together. He is at pains to state that he approves of the authorized Grammar. "I know," he says, "none (all circumstances considered) to whom our Grammar, allowed by public authority, ought to yield one foot of ground in regard to plainness and easiness, if it be rightly understood and taught accordingly."

Stockwood wrote the following curious book of 100 pages:

1589.

A Bartholomew Fairing for Parentes, to bestow upon their sonnes and daughters, and for one friend to give unto another: Shewing that children are not to marie, without the consent of their parentes, in whose power and choice it lieth to provide wives and husbandes for their sonnes and daughters.

*Wherein is sufficiently proved, what in this point is the office of the fathers: and in like manner declared the part and duty of all obedient children. By John Stockwood, Minister and preacher of Tunbridge * * * London, Printed by John Wolfe, for John Harrison the yonger dwelling in Paternoster-rowe, at the signe of the golden Anchor. 1589. 12mo.*

In the dedication to Thomas Skevington, Esq., of Skevington, Stockwood says:

Children (right worshipful) as we all well know, when their parents or any of those, with whom they have any familiarity, go unto any fair, use commonly at their taking their journey to say unto them: "I pray you bring me home a fairing." And not only children are for the most part thus affected, but we see it also to be the fashion of others of greater growth and further years, whenas at fairs they meet with their friends and acquaintance to be begging and asking them: What will you give me for a fairing? And the courtesy that is this way bestowed be it in a manner never so small and simple, is notwithstanding well accepted and kindly taken from the hand of the giver, as being a sign and token of his good will and loving affection towards the party, on whom he doth bestow the same.

Stockwood explains that by the novelty of the title he hopes to draw the attention of readers to this very important matter of the choice of wives for their sons, and husbands for their daughters.

The late Prof. Henry Morley wrote the valuable "Memoirs of Bartholomew Fair," 1859, a book which he claims is "not only the first history of Bartholomew Fair, but the first serious history of any fair." In it a very interesting passage is given from John Stow (died 1605) describing the meetings of schoolmasters held at fair time, at which the boys of their several grammar schools repaired to the churchyard of St. Bartholomew, the Priory, in Smithfield, and where Stow in his youth had witnessed how "upon a bank boarded about under a tree, some one scholar hath stepped up, and there hath opposed and answered till he were by some better scholar overcome and put down; and then the overcomer taking the place, did like as the first. And in the end the best opposers and answerers had rewards, which I observed not but it made both good schoolmasters and also good scholars, diligently against such times to prepare themselves for the obtaining of this garland."

Stockwood also wrote:

1. *Quaestiones et Responsiones Grammaticales, ad faciliorem earum regularum explanationem, quae in Grammatica Liliiana habentur, aecommodatae, etc.* Lond. 1592. 8vo.
2. *Progymnasma Scholasticum. Hoc est, Epigrammatum Graceorum ex Anthologia selectorum ab He. Stephano duplicique eiusdem interpretatione explicatorum Praxis Grammatica.* * * * Lond. 1597.
3. *Disputatiuncularum grammaticalium libellus, ad puerorum in scholis trivialibus exaequenda ingenia excoGITatus.* Lond. 1598. 12mo. 3rd ed., 1607; 4th ed., 1619, 8vo.; and 6th ed., 1650.

Stockwood was head master of Tonbridge School. He died in 1610. (See article on him in Dict. Nat. Biog., vol. 54, p. 395.)

JOHN LILLY. c.1554-1606.

1579.

Euphues, The Anatomy of Wit. Editio princeps. 1579.

Professor Arber's reprint of 1868 is of the late Prof. Henry Morley's copy (believed to be unique) of the first edition, collated with editions of 1581 and 1582. Professor Arber states that there were six editions in the first two years, i. e., of the two parts, (1) Euphues, The Anatomy of Wit, and (2) Euphues and his England, which latter first appeared in 1580. It is stated that there were edi-

tions of the Anatomy of Wit in 1595, 1605 both parts, 1606, 1613, 1617, 1623, 1626, 1630-31, 1636 (both parts).

John Lyly: Born about 1554, died 1606; matriculated at Magdalen College, Oxford, 1571; M. A., 1575. He also studied at Cambridge, of which he became M. A., 1579. He sought court favor, became vice-master of St. Paul's and Savoy companies of child actors. Lyly's treatment of education in the *Euphues*, Mr. Sidney Lee points out, is directly borrowed from Plutarch's *Education*. As Mr. Lee suggests, *cf.* Plutarch: "*Philosophie*," translated by Philemon Holland,^a 1603, though this latter was later than Lyly's book.

In the *Anatomy of Wit* there is a whole section devoted to the subject of the education of youth. *Euphues* begins with insisting that the mother of a child shall also be the nurse.

Clear enunciation.

Moreover they are to be trained up in the language of their country, to pronounce aptly and distinctly, without stammering, every word and syllable of their native speech, and to be kept from barbarous talk, as the ship from rocks; lest, being affected with their barbarism, they be infected also with their unclean conversation.

The force of imitation.

It is an old proverb that if one dwell the next door to a cripple he will learn to halt, if one be conversant with a hypocrite, he will soon endeavour to dissemble. When this young infant shall grow in years and be of that ripeness that he can conceive learning, insomuch that he is to be committed to the tuition of some tutor, all diligence is to be had to search such a one as shall neither be unlearned, neither ill-lived, neither a light person.

The slight esteem of teachers.

If among all his servants he shall espy one, either filthy in his talk or foolish in his behaviour, either without wit, or void of honesty, either an unthrift or a wittall, him he sets not as a surveyor and overseer of his manors, but a supervisor of his children's conditions and manners, to him he committeth ye guiding and tuition of his sons, which is by his proper nature a slave, a knave by condition, a beast in behaviour. And sooner will they bestow an hundred crowns to have a horse well broken, than a child well taught, wherein I can not but marvel to see them so careful to increase their possessions, when they be so careless to have them wise that should inherit them.

The teacher like an expert physician or a cunning pilot.

Some fathers are overcome with the flattery of those fools which profess outwardly great knowledge, and show a certain kind of dissembling sincerity in their life, others at the entreating of their familiar friends are content to commit their sons to one without either substance of honesty or shadow of learning. By which their indiscreet dealing, they are like those sick men which reject the expert and cunning physician, and at the request of their friends admit the heedless practiser, which dangereth the patient, and bringeth the body to his [its] bane: Or not unlike unto those, which at the instant and importunate suit of their acquaintance refuse a cunning pilot, and choose an unskilful mariner, which hazardeth the ship and themselves in the calmest sea.

Fathers and sons.

Good God, can there be any that hath the name of a father which will esteem more the fancy of his friend than the nurture of his son? It was not in vain that Crates would often say, that if it were lawful even in the market place he would cry out: "Whither run you fathers, which have all your care and care to multiply your wealth, nothing regarding your children unto whom you must leave all?" In this they resemble him which is very curious about the shoe, and hath no care of the foot.

^a Philemon Holland's best known translation is that of the *Historie* (i. e., *Natural History*) of the World of Pliny, 1601, 1634, 1635. The book sums up the knowledge of the ancient world on science, and it is interesting that this famous translation takes place in the very age of Bacon.

How to make a gentleman.

It is good nurture that leadeth to virtue, and discreet demeanour that plaineth the path to felicity. If one have either the gifts of fortune, as great riches, or of nature, as seemly personage, he is to be despised in respect of learning. To be a noble man it is most excellent, but that is our ancestors, as Ulysses said to Ajax, as for our nobility, our stock, our kindred, and whatsoever we ourselves have not done, I scarcely accompt ours * * * It is virtue, yea virtue, Gentlemen,^a that maketh Gentlemen: that maketh the poor rich, the base-born noble, the subject a sovereign, the deformed beautiful, the sick whole, the weak strong, the most miserable most happy. There are two principal and peculiar gifts in the nature of man, Knowledge and Reason: the one commandeth, the other obeyeth: these things neither the whirling wheel of Fortune can change, neither the deceitful cavilling of worldlings separate, neither sickness abate, neither age abolish.

The degeneration of the universities.

Is it not become a by-word amongst the common people, that they had rather send their children to the cart, than to the University, being induced so to say, for the abuse that reigneth in the Universities, who sending their sons to attain knowledge, find them little better learned, but a great deal worse lived than when they went, and not only unthrifths of their money, but also bankrupts of good manners.

After touching upon physical exercise in the shape of martial affairs, shooting, darting,^b hawking, hunting, Euphues has a characteristic passage as follows:

The alternation in life.

As there is watching so there is sleep: as there is war so there is peace: as there is winter so there is summer: as there be many working-days, so is there also many holy-days: and if I may speak all in one word, ease is the sauce of labour, which is plainly to be seen, not only in living things, but also in things without life. We unbend the bow that we may the better bend him, we unloose the harp, that we may the sooner tune him, the body is kept in health as well with fasting as eating, the mind healed with ease, as well as with labour: those parents are in mind to be misliked which commit the whole care of their child to the custody of a hireling, neither asking neither knowing how their children profit in learning.

A curious anticlimax from the pretentious beginning!

The training up of youth.

But having said almost sufficient for the education of a child, I will speak two words, how he should be trained when he groweth in years. I cannot but mislike the nature of divers parents which appoint overseers and tutors for their children in their tender age, and suffer them when they come to be young men, to have the bridle in their own hand, knowing not that age requireth rather a hard snaffle than a pleasant bit and is sooner allured to wickedness, than childhood.

The sum of Euphues's educational views.

The sum of all wherewith I would have my Ephæbus [i. e., his pupil, in the same way that Rousseau calls his pupil Emile] endued, and how I would have him instructed, shall briefly appear in this following. First, that he be of honest parents, nursed of his mother, brought up in such a place as is incorrupt, both for the air and manners, with such a person as is undefiled, of great zeal, of profound knowledge, of absolute perfection, that he be instructed in philosophy, whereby he may attain learning, and have in all sciences a smack, whereby he may readily dispute of any thing. That his body be kept in his pure strength by honest exercise, his wit and memory by diligent study.

^a This recalls Chaucer's:

Lok who that is most vertuous alway,
Privé and pert, and most entendeth aye
To do the gentil dedes that he can,
Tak him for the grettest gentilman.

Wife of Bath's Tale, ll. 257-260.

^b I. e., throwing or shooting darts.

Then follows an appeal to young men to abandon allurements to vice, the beauty of women, and dicing—and the exhortation, “Serve God, fear God, love God, and God will bless you.”

The sweet of learning involves the sour of labour.

This passage occurs in Euphues to the gentlemen scholars in Athens :

Every action hath his end, and then we leave [i. e., leave off] to sweat when we have found the sweet. The Ant though she toil in summer, yet in winter she leaveth [off] to travel [i. e., work]. The bee, though she delight to seek the fair flower, yet is she at last cloyed with honey. The spider that weaveth the finest thread ceaseth at the last when she hath finished her web. But in the action and study of the mind (Gentlemen) it is far otherwise, for he that tasteth the sweet of learning endureth all the sour of labour. He that seeketh the depth of knowledge : is as it were in a labyrinth, in the which the farther he goeth, the farther he is from the end : or like the bird in the limebush, which the more she striveth to get out, the faster she sticketh in. And certainly it may be said of learning, as it was fained of nectar, the drink of the Gods, the which the more it was drunk, the more it would overflow the brim of the cup, neither is it far unlike the stone that groweth in the river of Caria, the which the more it is cut, the more it increaseth.

In the edition of 1581 Lyly writes :

To my verie good friends the Gentlemen Scholars of Oxford : It was reported of some, and believed of many, that in the education of Ephebus, where mention is made of Universities, that Oxford was either defaced or defamed * * * If I should now go about to make amends, I were then faulty in somewhat amiss, and should show myself like Apelles' prentice, who coveting to mend the nose, marred the cheek, and not unlike the foolish dyer, who never thought his cloth black until it was burned. If any fault be committed, impute it to Euphues who knew you not, not to Lyly, who hates you not.

From Euphues and his England :

The praise of the learning of Elizabeth.

In questioning not inferior to Nicaulia the Queen of Saba, that did put so many hard doubts to Solomon, equal to Nicostrata in the Greek tongue, who was thought to give precepts for the better perfection : more learned in the Latin, than Amalasunta : passing Aspasia in Philosophy, who taught Pericles : exceeding in judgment Themistocles, who instructed Pythagoras, add to these qualities, those, that none of these had, the French tongue, the Spanish, the Italian, not mean in every one, but excellent in all, readier to correct escapes in those languages, than to be controlled, fitter to teach others, than learn of any, more able to add new rules, than to err in the old : Insomuch as there is no ambassador, that cometh into her court, but she is willing and able both to understand his message, and utter her mind, not like unto the kings of Assyria who answered embassies by messengers, while they themselves either dally in sin, or snort in sleep * * * O noble pattern of a princely mind, not like to the kings of Persia, who in their progresses, did nothing else but cut sticks to drive away the time, nor like the delicate lives of the Sybarites, who would not admit any art to be exercised within their city, that might make the least noise * * * Such are her gifts that the living God hath indued her withal, that look in what art or language, wit or learning, virtue or beauty, any one hath particularly excelled most, she onely hath generally exceeded everyone in all, insomuch, that there is nothing to be added, that either man would wish in a woman, or God doth give to a creature. I let pass her skill in music, her knowledge in all the other sciences, when as I fear lest by my simplicity I should make them less than they are, in seeking to show how great they are, unless I were praising her in the gallery of Olympia, where giving forth one word I might hear seven * * *

Behold, Ladies, in this glass a Queen, a woman, a virgin in all gifts of the body, in all graces of the mind, in all perfection of either, so far to excell all men, that I know not whether I may think the place too bad for her to dwell among men.

To talk of other things in that Court, were to bring eggs after apples, or after the setting out of the sun, to tell a tale of a shadow.

But this I say, that all offices are looked to with great care, that virtue is embraced of all, vice hated, religion daily increased, manners reformed, that

who so seeth the place there, will think it rather a church for divine service, than a court for princes' delight.

All this extravagant exaggeration in praise of Elizabeth by so many writers at any rate suggests that learning in women was thought desirable, and unconsciously may have assisted the idea of the higher education of women more than at first sight appears, valueless as such testimony is for an accurate estimate as to the actual learning of Elizabeth.

ANONYMOUS.

1579.

Cyville and uncyville life. A discourse very profitable, pleasant, and fit to be read of all Nobilitie and Gentlemen. Where, in form of a Dialogue [between Vincent and Valentine] is disputed, what order of lyfe best becometh a Gentleman in all ages and times: as wel for educatiō, as the course of his whole life. R. Jones, London, 1579. 4to.

The printer of this book dedicates it to Sir Francis Walsingham, but the author's name is withheld.

The following is the argument and occasion of the dialogue:

It happened (as oft it doth) that divers gentlemen being convited to dine together: Among many other things, they chanced to fall in speech of the country and courtly lives, reasoning whether it were better for the gentlemen of England to make most abode in their country houses (as our English manner is,) or else ordinarily to inhabit the cities and chief towns, as in some foreign nations is the custom. These gentlemen as they were diversely disposed and used so were their opinions of this matter likewise differing: some commending the country dwelling, others preferring the city habitation. This matter a while spoken of by everyone, was at length by assent of the whole company disputed by two gentlemen, th' one (for this time) I will call Vincent, th' other Valentine, both men of more than common capacity and (haply) somewhat learned. Vincent had been brought up in the country: Valentine his education and life was in courts and cities. Either of them with the best reasons they could, maintained their opinions, as hereafter in this discourse you shall plainly perceive.

Indirectly this furnishes a side light on the general condition of the age in which it was written. It establishes a preference for town life. Especial stress is laid upon the fact that in towns there are the most skillful tutors to instruct children, and Vincent says to Valentine at the end of the dialogue:

Through your good reasons I am brought to know that the education of a gentleman ought to be only in learning and arms, and that no gentleman, no, nor no nobleman, should withdraw or hold back his son from the attaining of these knowledges, which are the very true and only qualities or virtues of a gentleman, as things not only be seeming such a person, but also for the service of a prince or state very necessary.

CHRISTOPHER OCLAND.^a

1580.

Anglorum Praelia.

This is, I believe, the first book published in England intended for school use with a view of definitely giving to the youthful mind due and proper material out of which patriotism might not unreasonably be expected to develop.

The writer in question is Christopher Ocland, and his book—written throughout, it should be added, in Latin—has on its title page (dated 1580): "*Anglorum Praelia: Ab anno Domini 1327 anno nimirum primo incltytissimi Principis Edwardi eius nominis tertii usque ad annum Domini 1558. Carmine summatim*

^a This account first appeared in the Journal of Education, London, June, 1899.

perstricta. Christophoro Oclando Buckinghamiensi Anglo Authore." [In the edition of 1582, on the title-page, Ocland is announced as "primo Scholae Southwarkiensis prope Londinum, dein Cheltenhamensis, quae sunt a serenissima sua Majestate fundatae, Moderatore."]

[To the 1582 edition is also added: "Item: *De pacatissimo Angliae statu a imperanti Elizabetha compendiosa Narratio.*" And then the proud words: "*Haec duo Poemata, tam ob argumenti gravitatem quam Carminis facilitatem, Nobilissimi Regiae Majestatis Consilarii in omnibus huius regni Scholis praelegenda pueris praescripserunt.*"]

In 1582 appeared a quarto edition and also an octavo edition; in 1589 a further edition of the Elizabethais. There is also a translation of the Elizabethais into English, done by John Sharrock in 1585.

The title indicates the contents of the book. It is an account in Latin verse of the wars of England carried on between 1327 (the accession of Edward III) and 1558 (the death of Mary). There is a Latin poem by Richard Mulcaster, and also one by the well-known poet Thomas Watson, prefixed to the Elizabethais. Readers of Positions will remember the ecstasy of praise in which Mulcaster indulges over Queen Elizabeth. In these verses Mulcaster envies Ocland the subject of his verses after the strain:

"Nam quid nobilius sol nostra Principe cernit?"

In the 1582 octavo edition of the *Anglorum Praelia*, on the page opposite to the beginning lines, and occupying the whole page, are the royal arms of Queen Elizabeth. The title-page had already announced "*Cum privilegio Regiae Maiestatis.*"

But the point which requires full recognition about Christopher Ocland is the fact that the Lords of the Privy Council ordered his *Praelia Anglorum* to be used in the grammar schools. I venture to transcribe the minute:^b

A letter to the Commissyoners for Causes Ecclesiasticall in London that whereas there hath bene of late a booke written in Latyn verse by one Christopher Ockland, intituled "Anglorum Prelia," which, as he enformeth, hath bene by him at his great charges aboute half a yere sithence imprinted and published, and now againe lately imprinted with the addytion of a shorte treatise or appendix concerning the peaceable government of the Quenes Majestie; forasmuche as his travell therein with the qualitie of the verse hath receyved good comendacion, and that the subjecte or matter of the said booke as he is worthie to be read of all men and especially in the common schooles, where divers heathen poetes are ordinarily read and taught from the which the youthe of the Realme receyve rather infectyon in manners and educatyon than advauncement in vertue, in place of which poetes their Lordships thincke fitte this booke were read and taught in the grammer schooles, their Lordships therefore have thought good, as well for the commoditie of the said Ockland and for the incorageing of him and others that are learned to bestow their travell to so good purposes, as also for the benefitte of the youthe and the removing of such lascivuous poetes as are commonly read and taught in the said grammer schooles, requiring them upon the receipt hereof to write their letters unto all the Bushoppes through the Realme to give commaundement that in all the grammer and free schooles within their severall Dyoces the said bookes "*De Anglorum Praeliis*" and peaceable government of her Majestie maye be, in place of some of the heathen poetes nowe read among them as Ovide "*De Arte Amandi*," "*De Tristibus*," or such lyke, may be receyved and publickly read and taught by schoolemasters unto their schollers in some one of their formes in the schooles fitte for that matter.

This remarkable minute is dated *xxi Aprilis*, at Grenewiche, 1582.

Perhaps the most interesting point that arises from the passage is the direct

^a This is described elsewhere as *Εἰρηναρχία*.

^b Acts of the Privy Council of England. Edited by J. R. Dasent. New series. Vol. XIII, A. D. 1581-82, pages 389-390.

relation which the privy council takes up to the work of education. The mot d'ordre is given to all schools (we should say all secondary schools) to use a certain book in place of works commonly read and on the whole less advantageous. It is important also to notice that the privy council, in its supervision of schools, works its will through the dioceses of the bishops. This is natural enough when it is remembered that the bishops had the licensing of schoolmasters in their hands, and also that in their visitations they also inquired into the way in which schools were being carried on throughout their dioceses.

The reading of "heathen poetes," and the reconciliation of such a practice with a Christian teacher was a stumbling block with many of the pious in all generations of the Christian era. There were those, of course, who held that the broad highway of the classics was the only way to intellectual salvation. Ascham, for instance, often heard ^a Sir John Cheke say: "I would have a good student pass rejoicing through all authors, both Greek and Latin; but he that will dwell in these few books only, first in God's Holy Bible and then join with it Tully in Latin, Plato, Aristotle, Xenophon, Isocrates, and Demosthenes in Greek, must needs prove an excellent man." Here, however, Sir John Cheke is speaking of "students," and his list is very choice. Dr. Laurence Humphrey, in his treatise *Of Nobility*,^b on the other hand, pointed out the danger of indiscriminate classical teaching with the young, had protested against Ovid, and only included Terence because, as he says, "I saw Cicero so much esteem him."

In the *Anglorum Prælia* is given the copy of the letters directed by the minute quoted above to be sent to all the bishops throughout England and Wales. It will be seen that it was drawn up sixteen days after the meeting of the privy council. It reads:

After our heartie commendations, &c. Whereas wee of hir Maiesties high Commission Ecclesiastical have received letters from the Lordes of hir Highnesse moste honourable privie Counsell, That we should directe order to all the Byshops of the Realme, to cause to bee receyved and publiquely read and taught in all Grammar and Free Scholes within their severall Dioceses a Booke in Latine verse of late imprinted, entituled "*Anglorum Prælia*," sette forth by one Christopher Ocklande, as by the true Copie of their Honours Letters, which wee sende you here inclosed, it may appeare unto you. *These* are therefore to require you, according to their Honours pleasures signified to us in that behalfe, forthwith upon receipt hereof to take present order within your Dioces for the due accomplishment of their sayde Letters accordingly. And so wee bidde you heartily farewell. From London the seaventh of May, 1582. Your Loving Friendes.

I have not as yet found any account of how the "*Anglorum Prælia*" was esteemed in the schools. But it is possible to form a judgment by remembering that the subject was the martial glories of England, and that these included the feats of Edward III and Henry V at a period three hundred years nearer to them than we are. In fact, it would seem that Ockland's book was somewhat similar in its line of interest to that very successful book, *Deeds that Won the Empire*, of to-day. It was, however, written in Latin—much shorter and much more restrained in detail, though perhaps not always in its enthusiasm. The following is the account of Edward III and the Black Prince at Cressy:

Fulminat ense pater Princeps Edwardus, et eius
Filius impubes; illoque Britannica virtus
Quanta sit eluxit bello, quo millia caesa
Triginta aut plus eo, campique cruore mædebant;

and so on.

^a Strype's *Life of Cheke*, Oxford edition, 1821, page 153.

^b 1563.

Henry V at Agincourt is thus described:

Ipse manu magno conatu rex rotat ensem,
Nobilior faciebat idem pars, turbaque tota.
Omne nemus resonat pulsatae cassidis ictu
Armorum crebris tinnitibus insonat unda,
Vicinique suis colles cum vallibus aegros
Accipiunt gemitus morientum, sanguis inundat

etc., from which it will be gathered that there is, for modern taste, rather too much enthusiastic gloating over bloodshed.

The "Elizabetha" is included in the volume. This is a panegyric of Ocland's queen up to 1580, and a recital of the peaceable state of England. There is also an account of the members of Her Majesty's council. The following extract, from John Sharrock's translation, will give some idea of the matter and style of the verses. They deal with the towardness of Queen Elizabeth in her childhood:

But when her mother tongue she knew,
Expressing signs of wondrous wit, and judgement to ensue:
She at her prudent sayings made astonished men to stand,
And books, desirous to be taught, would always have in hand.
She scarce the letters with her eyes intente did behold.
Their several names, but thrice before by her instructors told:
But perfect them at fingers' end as two months taught,
Their figures diverse made, deciphering well, by judgements rare.
Yea, in few days (a marvel great it is to speak no doubt)
The princely imp by industry such sap had sucked out,
That, without counsel to assist, she anything could read.

With regard to Christopher Ocland himself, the facts to be gathered are few. While master at St. Olave's School in 1571, it appears that he received 20 marks a year, for which he was to teach ten or twelve boys at first and to help the usher to teach the "petytes." Ocland was also to be allowed to take six or eight scholars. This comes from the minutes of the vestry of the parish of St. Olave.^a In the minutes of the same vestry, January 27, 1571, there is another schoolmaster, one John Poyne.

There is a letter quoted in Sir Henry Ellis's collection of letters, written by Ocland to Sir Julius Caesar, chiefly as to his poverty; but the most pathetic letter is the one to the great Lord Burghley, begging to be relieved in his distress. It is a vivid letter. It might be used as an apt illustration to Melancthon's Miseries of Schoolmasters. After reading it one hardly needs more details of Ocland's life. No history of education can be complete which does not include the side light afforded by such a letter. It takes us right into the middle of Ocland's life struggle:

Help, my very good Lord, my singular good Lord, help I pray and most humbly desire your honour for God's sake, your poor and unfortunate Christopher, that her Majesty may give me a prebend or benefice that will first fall. I never had anything at her Grace's hands for all my books heretofore made of her Highness. I trust my Lord Chancellor will give his good word with you and the other Lords of the Council. Or at the least speak to D. Aubrey, the Master of the Requests, and he will move my cause the sooner at your speech. At the writing of this, my lord, tidings come to me that one Hurdes, a serjeant of London, who cast me in the Counter upon the feast of the Nativity of Christ last past, hath a *Capias utlagatum* out for me. I ought [owed] him but five pounds and he hath condemned me in forty pounds. The learned in the law say it to be ridiculous that I was bound in thirty pounds for payment of five pounds, and the condemnation upon the outlawry is risen to forty pounds. Quid faciam? Quo me vertam? Mors est mihi lucro.

He goes on to explain he has no relations to fall back on. His wife is paralyzed—has been these three years—and grows worse every day on account of

^a Quoted in Sir Henry Ellis's Letters of Eminent Literary Men, pages 65-66.

the misfortunes of her sons. Prison for Ocland would mean death to his wife and to their one daughter. He begs Lord Burghley, therefore, to get the writ of outlawry stayed. He then continues:

I teach school at Greenwich, where my labour will not find me bread and drink. I dare not teach in London where it would be better. For my debt is grown to twenty-three pounds in ten years, for so long ago it is since I gave over teaching school and began to get out "*Anglorum Praelia*" and my other books. I have compiled also at this time a book, the title is "*De vitis aliquot illustrissimorum virorum in Anglia*," wherein I do not forget your honourable Lordship to have due place. I have opened myself to your Lordship, for truly it is said, "*Crescuntque tegendo vulnera*." Thus, having been too much tedious, I crave pardon, and pray God to send your Honour long life to the service of her Majesty in Council, the benefit of the realm, and the comfort of us all true English. Greenwich, this xlii. of October, 1590.—Your Lordship's most bounden for ever, most poor, and most wretched.

CHRISTOPHER OCLAND.

To the right Honourable and his singular good Lord, the Lord Burghley, Lord Treasurer of England.

There does not seem to be any indication as to whether Lord Burghley responded to the pathetic appeal, but Mr. Thompson Cooper, the writer of the notice on Ocland in the Dictionary of National Biography, gives us a reference to a petition to Prince Charles, preferred January 14, 1617, by Ocland's daughter (mentioned above), which met with better hap. Jane Ocland, the daughter, received a gift of 22 shillings. One's thoughts at once recur to Edmund Spenser's lines, printed, be it remembered, a few years after Ocland's letter was written:

Full little knowest thou that hast not tried
What hell it is in suing long to bide * * *
To have thy prince's grace, yet want her peeres.

Poor Ocland had made a bid for his prince's grace by his "*Elizabetha*," and for "her peeres" by his letter to Lord Burghley. But, apparently, he obtained neither. "Where I hanked after plenty, I have run upon scarcity," said Ocland. It is little compensation that now he should turn out to be the first English writer of a book on civics. But the title, such as it is, does not seem to be undue to him.

RICHARD MULCASTER c.1530-1611.

Mulcaster was born about 1530. He was educated at Eton, and in 1548 entered King's College, Cambridge. He migrated to Oxford, and in 1555 was elected student of Christ Church. He became a schoolmaster in 1558, and in 1561, the same year in which he first published his *Positions*, became the first head master of Merchant Taylors' School, at Lawrence Pountney Hill. In 1586 he quarreled with his governors as to his salary, and resigned his post. Mulcaster's career is then said to have been: Surmaster of St. Paul's School, 1586; head master, 1596 (Mr. Quick suggests that "after his reign of twenty-six years at Merchant Taylors' he would not be likely to accept any mastership where he would be a subordinate"); vicar of Cranbrook, in Kent, 1590; prebendary of Sarum, 1594; rector of Stanford Rivers, in Essex, 1598; died 15th April, 1611. Mulcaster took part in the royal pageant at Kenilworth in 1575. Mr. Quick states that Mulcaster was a correspondent of Sir Philip Sydney's, and it is most probable that Edmund Spenser was one of his pupils. Shakespeare is sometimes thought to have had Mulcaster in mind, in his *Holofernes*, of whom Armado says: "I protest the schoolmaster is exceeding fantastical; too too vain, too too vain."

For further account of Richard Mulcaster, see—

R. H. Quick: Reprint (1888) of the Positions, in the Appendix.

R. H. Quick: Educational Reformers. 1890 ed. Pages 90-102.

Henry Barnard: English Pedagogy, 2d series, pages 177-184.

A careful study of Mulcaster is the following: *Leben und Werke Richard Mulcaster's, eines englischen Pädagogen des 16. Jahrhunderts* (Dresden, 1893, 8°, pp. 58), by Theodor Klähr.

In the thirty-ninth volume of the Dictionary of National Biography the Rev. J. H. Lupton, present surmaster of St. Paul's School, has written a biography.

Mulcaster is mentioned in Thomas Fuller's *Worthies of England* (Westmoreland), indorsing a traditionary view: "It may be truly said (*and safely for one out of his school*) that others have taught as much learning with fewer lashes." (Quoted by J. E. Bailey in his *Life of Fuller*.)

1581.

Positions: Wherein those primitive circumstances be examined, which are necessarie for the training up of children, either for skill in their booke, or health in their bodie. Written by Richard Mulcaster, Master of the Schoole erected in London anno 1561, in the parish of Saint Laurence Pountney, by the Worshipful Companie of the Merchaunt Tailers of the said Citie. Imprinted at London by Thomas Vautrollier, dwelling in the blacke Friers by Ludgate, 1581.

Mr. Quick, together with the former U. S. Commissioner of Education, Henry Barnard, with great public spirit issued a handsome reprint of the Positions in 1887. It was printed by Harrison & Sons, St. Martin's Lane, London, and is published through Longmans, Green & Co., London and New York. In the very able and interesting appendix, which contains an account of Mulcaster, Mr. Quick mentions that the Gentleman's Magazine, Volume LXX, page 603, speaks of a second edition of the Positions (4to) published in 1587, and that W. C. Hazlitt in his "Handbook" (p. 404, ed. 1867), says the Positions was reprinted in 1587 and 1591. The first edition of 1561 and the second of 1581 are both in the Quick loan collection.

Mulcaster may be described as garrulous and pedantic, and accordingly there is little difficulty in describing the Positions entirely in his own words.

The occasion of this discourse.

I have taught in public without interrupting my course, now two and twenty years, and have alway had a very great charge under my hand, which how I have discharged, they can best judge of me, which will judge without me. During which time both by that, which I have seen in teaching so long, and by that which I have tried, in training up so many, I do well perceive, upon such lets [hindrances], as both myself am subject unto, and other teachers no less than I, that neither I have done so much as I might, neither any of them so much as they could. Which lets, me think[s], I have both learned what they be, and withal conceived the mean, how to get them removed. Whereby both I and all other may do much more good, than either I or any other hitherto have done.

Why Mulcaster writes in English.

I do write in my natural English tongue, because though I make the learned my judges, which understand Latin, yet I mean good to the unlearned, which understand but English. And better it is for the learned to forbear Latin, which they need not, than for the unlearned to have it, which they know not. By the English both shall see, what I say, by Latin but the one which were some wrong, where both have great interest, and the unlearned the greater, because the unlearned have not any but only such English helps, the learned can fetch theirs from the same fountains, whence I fetch mine. My meaning is principally to help mine own country, whose language will help me, to be understood of them, whom I would persuade: to get some thanks of them, for my good will to do well: to purchase pardon of them, if my good will do not well. The parents and friends with whom I have to deal, be mostwath no latin-

ists: and if they were, yet we understand that tongue best, whereunto we are first born, as our first impression is alway in English, before we do deliver it in Latin. And in persuading a known good by an unknown way, are we not to call unto us, all the helps that we can, to be thoroughly understood? He that understands no Latin, can understand English, and he that understands Latin very well, can understand English far better, if he will confess the truth, though he think he hath the habit and can Latin it exceeding well.

The alleging of authors (i. e., the quoting of authorities).

But here by the way, I must advertise my reader thus much, that I think a student ought rather to invest himself in the habit of his writer, than to stand much upon his title, and authority, in proof or disproof, seeing who knoweth not, that all our studies be generally debtors to the first devise, and fairest delivery? Therefore to avoid length thereby, I will neither use authority, nor example, seeing matter is the main, and not the man's name, saving only where one man's deposition upholds or overthrows: and the ground of the example is so excellent in that kind, as it were too much unkindness, not to let the person be known, where the fact is so famous. I will rest upon reason the best, where I find it, the next where that fails, and conjecture is probable, to prove such things, as reason must pattern. If the trial be in proof, and experience must guide it, I will bind upon proof, and let trial [i. e., experience] be the touch.

The age at which the child is to go to school to be settled by the parent, after consulting others.

At what years [the child is to go to school] I cannot say, because ripeness in children is not tied to one time, no more than all corn is ripe for one reaping, though mostwhat about one. Some be hastings and will on, some be hardinges, and draw back: some be willing when their parents will: some but willing, when they will themselves, as either will to do well, upon cherishing wisely, or pleasure to play still, upon cockering fondly, hath possessed their minds.

But he that deserveth to be a parent, must dispose himself to be also a judge, in all these cases: and who is so ill-friended, as he hath not one, with whom to confer, to learn by advice, the towardness and time of his young son's schooling, if he be not able to look into it himself? They that limit the beginning to learn by some certain years, have an eye to that knowledge, which it were pity were lost, say they, and may easily be gained in those young years. * * * But more pity it were, for so petty a game, to forego a greater, to win an hour in the morning, and lose the whole day after: as those people most commonly do, which start out of their beds too early, before they be well awaked, or know what it is a clock; and be drowsy when they are up, for want of their sleep.

The teacher has to train perception, memory, judgment.

These three things, wit to take, memory to keep, discretion to discern, and mo if ye seek, though but branches to these, which I choose for my purpose, shall ye find peering out of the little young souls: when you may see what is in them, and not they themselves. Whose ability to increase in time, and infirmity to crawl at that time is commended to them, which first begot them, or best can frame them. Now these natural towardnesses being once espied, in what degree they rise, because there is odds in children by nature, as in parents by purchase, they must be followed with diligence, increased by order, encouraged by comfort, till they come to their proof. Which proof travel [=work] in time will perform, haste knits up too soon and unperfect, slowness too late and too weak.

Instruction before the grammar stage.

This consists of reading, writing, drawing, singing, and playing, and is dwelt upon by Mulcaster at greater length in his *Elementarie* (see p. 654).

The importance of training to read.

Reading offereth herself first in the entry, chosen upon good ground, continued upon great proof, enrolled among the best, and the very foremost of the best, by her own effects, as very many so very profitable. For whether you mark the nature of the thing, while it is in getting, or the goodness thereof when it is gotten, it must needs be the first, and the most fruitful principle, in training of the mind * * *. Partly by use and partly by argument, the child gets the habit, and cunning to read well, which being once gotten, what a cluster of commodities doth it bring with all? What so ever any other, for either profit or pleasure, of force or free-will, hath published to the world, by

pen or print, for any end, or to any use, it is by reading all made to serve us: in religion to love and fear God, in law to obey and please men: in skill to entertain knowledge, in will to expel ignorance, to do all in all, as having by it all helps to do all things well. Wherefore I make reading my first and fairest principle of all other, as being simply the first in substance, and leaning to none, but leading all other, and growing after so great, as it rangeth over all, being somewhat without other, other nothing without it.

The importance of writing.

Next to reading followeth *writing*, in some reasonable distance after, because it requireth some strength of the hand, which is not so soon staid nor so stiff to write, as the tongue is stirring and ready to read * * *. [Now that writing has reached such perfection] it proves the prop to remembrance, the executor of most affairs, the deliverer of secrets, the messenger [messenger] of meanings, the inheritance of posterity, whereby they receive whatsoever is left them, in law to live by, in letters to learn, in evidence to enjoy.

The importance of drawing, as a subject of instruction.

Commonly they that have any natural towardness to write well, have a knack of drawing too, and declare some evident conceit in nature bending that way. And as judgment by understanding is a rule to the mind to discern what is honest, seemly, and suitable in matters of the mind, and such arguments as fall within compass of general reason exempt from sense: so this quality by drawing with pen or pencil, is an assured rule for the sense to judge by, of the proportion and seemliness of all aspectable things * * *. And why is it not good to have every part of the body: and every power of the soul to be fined to his best? * * * If I or any else should seem to condemn that principle, which brought forth Apelles, and that so known a crew of excellent painters, so many in number, so marvellous in cunning, so many statuaries, so many architects: nay whose use all modelling, all mathematics, all maneries do find and confess to be so notorious and so needful: both I and that any else might well be supposed to see very little, not seeing the use of that, which is laboured for sight, and most delightful to see * * *. [Aristotle] sayeth, that as writing and reading do minister much help to traffic, to householdry, to learning and to all public dealings: so drawing by pen or pencil, is very requisite to make a man able to judge, what that is which he buyeth of artificers and craftsmen, for substance, form and fashion, durable and handsome or no: and such other necessary services, besides the delightful and pleasant.

The importance of music.

[Of all subjects I do not find any] wherein speech might so spread all the sails, which she hath, and the pen might use all the pencilling, which she can, as in painting out the praise and ornaments of Music. The matter is so ample, the ground so large, the reasons so many, which sound to her renown: the thing itself so ancient, and so honourable, so general, and so private, so in churches, and so without, so in all ages, and in all places, both highly preferred, and richly rewarded: the princess of delights, and the delight of princes: such a pacifier in passion, such a mistress to the mind, so excellent in so many, so esteemed by so many, as even multitude makes me wonder and withal to stay my hand, for fear that I shall not easily get thence if I enter once in. * * * [In the training of children] music will prove a double principle both for the soul, by the name of learning, and for the body, by the way of exercise.

There is no writer on education who has more energetically insisted on the necessity of physical training than has Richard Mulcaster. Anyone specially interested in this subject should consult the book and read chapters 6-35. The following are the—

Heads of the chapters on physical education.

Of exercises and training the body. How necessary a thing exercise is. What health is and how it is maintained: what sickness is, how it cometh, and how it is prevented. What a part exercise playeth in the maintenance of health. Of the student and his health. That all exercises though they stir some one part most, yet help the whole body.

The branching, order and method, kept in this discourse of exercises.

Of Exercise in general, and what it is. And that it is athletical for games, martial for the field, physical for health, preparative before, postparative after the standing exercise: some within doors, for foul weather, some without for fair.

Of the particular exercises. Why I do appoint so many, and how to judge of them, or to devise the like.

Of loud speaking. How necessary, and how proper an exercise it is for a scholar.

Of loud singing, and in what degree it cometh to be one of the exercises.

Of loud and soft reading.

Of much talking and silence.

Of laughing and weeping. And whether children be to be forced toward virtue and learning.

Of holding the breath.

Of dancing, why it is blamed, and how delivered from blame.

Of wrestling.

Of fencing, or the use of the weapon.

Of the top, and scourge.

Of walking.

Of running.

Of leaping.

Of swimming.

Of riding.

Of hunting.

Of shooting.

Of the ball.

Of the circumstances, which are to be considered in exercise.

The nature and quality of the exercise.

Of the bodies which are to be exercised.

Of the exercising places.

Of the exercising time.

Of the quantity that is to be kept in exercise.

Of the manner of exercising.

An advertisement to the training master. Why both the teaching of the mind and the training of the body be assigned to the same master. The inconveniences which ensue, where the body and the soul be made particular subjects to several professions. That who so will execute anything well, must of force be fully resolved in the excellency of his own subject. Out of what kind of writers the exercising master may store himself with cunning. That the first grounds would be laid by the cunningest workman. That private discretion in any executor is of more efficacy than his skill.

That all boys are not to be set to school. The learning to read and to write.

Sure all children may not be set to school, nay not though private circumstances say yea. And therefore schools may not be set up for all, though great good will find never so many founders, both for the place wherein to learn, and for the number also which is for to learn: that the state may be served with sufficiently enough, and not be pestered with more than enough. And yet by the way for writing and reading so they rested there, what if everyone had them, for religion sake, and their necessary affairs? Besides that in the long time of their whole youth, if they minded no more, these two were easily learned, at their leisure times by extraordinary means, if the ordinary be dainty and no school nigh. Every parish hath a minister, if none else in the parish, which can help writing and reading.

The reasons why maidens are to be set to learning.

And to prove that they are to be trained, I find four special reasons, whereof any one, much more all may persuade any their most adversary, much more me, which am for them tooth and nail. 1. The first is the manner and custom of my country, which alloweth them to learn, will be loath to be contraried by any of her countrymen. 2. The second is the duty, which we owe unto them, whereby we are charged, not to leave them lame, in that which is for them. 3. The third is their own towardness, which God by nature would never have given them to remain idle, or to small purpose. 4. The fourth is the excellent effects in that sex, when they have had the help of good bringing up: which commendeth the cause of such excellency, and wisheth us to cherish that tree, whose fruit is both so pleasant in taste and so profitable in trial. What can be said more? our country doth allow it, our duty doth enforce it, their aptness calls for it, their excellency commands it: and dare private conceit, once seem to withstand where so great, and so rare circumstances do so earnestly commend.

The custom of our country as to the education of girls.

If I should seem to enforce any novelty I might seem ridiculous, and never see that thing take place, which I tender so much: but considering, the custom

of my country hath delivered me of that care, which hath made the maiden's train [=education] her own approved travel [=work] what absurdity am I in, to say that it is true, which my country dare avow, and daily doth try? I set not young maidens to public grammar schools, a thing not used in my country, I send them not to the Universities, having no precedent thereof in my country, I allow them learning with distinction in degrees, with difference of their calling, with respect to their ends, wherefore they learn, wherein my country confirmeth my opinion.

The Elizabethan constellation of learned women.

If no story did tell it, if no state did allow it, if no example did confirm it, that young maids deserve the training, this our own mirror, the majesty of her sex, doth prove it in her own person, and commends it to our reason. We have besides her highness, as undershining stars, many singular ladies and gentlewomen so skilful in all cunning, of the most laudable, and loveworthy qualities of learning, as they may well be alleged for a precedent to praise, not for a pattern to prove like by: though hope have a head, and nature be no niggard, if education do her duty, and will seek to resemble even where precedents be passing, both hope to attain to, and possibility to seem to. Wherefore by these proofs, I take it to be very clear, that I am not far overshot, in admitting them to train, being so trainable by nature and so notable by effects.

The subjects for girls to learn.

And is not a young gentlewoman, think you, thoroughly furnished, which can read plainly and distinctly, write fair and swiftly, sing clear and sweetly, play well and finely, understand and speak the learned languages, and those tongues also which the time most embraceth, with some *logical* help to chop, and some *rhetic* to brave. Besides the matter which is gathered, while these tongues be either learned, or looked on, as words must have seats, no less than raiment bodies. Were it any argument of an unfurnished maiden, besides these qualities to draw clean in good proportion, and with good symmetry? Now if she be an honest woman, and a good housewife too, were she not worth the wishing, and worthy the shrining? And yet such there be, and such we know.

The doubtful good of foreign travel as a means of education.

As young gentlemen may travel, both for their pleasure, to see foreign countries, and for their profit, to return home wise: so their own country desires them to mind that profit in deed, and not to mar it with too much pleasure, which is the cause why that all ages have misliked travelling, as the occasion of corruption at most, and think it better forborne for hindering of so many, than to be allowed, for the good of some few, which is hazarded at the first, and uncertain to prove well. The reason of all this is, both for the foreign evil, which may corrupt, and for the very good, which will not fit, be it never so fit there, from whence it is fetched.

The best hours for study and play.

From seven of the clock, though ye rise sooner, (as the *lamb* and *lark* be the proverbial leaders when to rise and when to go to bed) till ten before noon, and from two till almost five in the afternoon, be the best and fittest hours, and enough for children wherein to learn. The morning hours will best serve for the memory and conceiving: the afternoon for repetitions, and stuff for memory to work on. The reasons be the freeness or the fulness of the head. The other times before meat be for exercises, as hath been fully handled heretofore. The hours before learning, and after meat, are to be bestowed, upon either neatening of the body, or solacing of the mind, without too much motion: wherein as I said before the greatest part, and the best to be played consisteth usually in the trainer's discretion, to apply things according to the circumstances of person, place, and time.

The following is a remarkable passage, and illustrates the clear-headedness of Mulcaster:

Of the elementary teachers' entertainment.

But to say somewhat concerning the teachers' reward, which is the encouragement to good teaching, what reason is it, though still pretended, and sometimes performed, to increase wages, as the child waxeth in learning? * * * What reason carrieth it, when the labour is less, than to enlarge the allowance? the later master to reap the benefit of the former's labour, because the child makes

more show with him? Why? It is the foundation well and soundly laid, which makes all the upper building muster, with countenance and continuance. If I were to strike the stroke, as I am but to give counsel, the first pains truly taken should in good truth be most liberally recompensed: and less allowed still upward as the pains diminish, and the ease increaseth. Whereat no master hath cause to repine, so he may have his children well grounded in the Elementary. Whose imperfection at this day doth marvellously trouble both masters and scholars, so that we can hardly do any good, nay scanty tell how to place the too too raw boys in any certain form, with hope to go forward orderly, the ground work of their entry being so rotten underneath.

The qualifications of a satisfactory master.

Besides his manners and behaviour, which require testimony and assurance: besides his skill in exercising and training of the body, he must be able to teach the three learned tongues, the latin, the greek, the hebrew, if the place require so much, if not so much as is required. Wherein assuredly a mediocrity in knowledge will prove too mean to implant, that in another which he hath in himself. For he that meaneth to plant some little well: must himself far exceed any degree of mediocrity. He must be able to understand his writer, to master false prints, unskilful dictionaries, simple conjectures of some smattering writers concerning the matter of his train [=teaching], and be so appointed ere he begin to teach, as he may execute readily, and not make his own imperfection, to be a torture to his scholar, and a schooling to himself. For it is an ill ground to grow up from ignorance by teaching, in that place, where no ignorance of matter at least should be, at the very first: though time and experience do polish out the manner. He must have the knowledge of all the best grammars, to give notes by the way still, though he burden not the child's memory, of course, with any more than shall be set down.

In addition to these and further points of learning there are other desiderata.

There are required besides * * * *hardness* to take pains: *constancy* to continue and not to shrink from his trade: *discretion* to judge of circumstances: *lightsomeness* to delight in the success of his labour: *heartiness* to encourage a toward youth: *regard* to think each child an Alexander: *courteous lowliness* in himself, as if he were the meanest though he were known to be the best. For the very least thing in learning, will not be well done, but only by him, which knoweth the most, and doth that which he doth with pleasure and ease, by reason of his former store.

The inadequate salaries paid to teachers.

[These qualities (see *supra*) deserve much], and in our schools they be not generally found, because the rewards for labour there be so base and simple, yet the most near is best in choice, and many there be which would come near, if entertainment were answerable. Let the parents, and founders provide for the one: and certainly they shall find no default in the other.

Mulcaster proposed that in the universities there should be seven colleges, divided off into specialistic studies with practical aims. There should be: 1. The college of tongues; 2. The college for mathematics; 3. The college for philosophy; 4, 5, 6. Colleges for divinity, law, and physick; 7. College for "training maisters."

The seventh college for training masters, and the necessity thereof.

This suggestion of a training college for schoolmasters is one of the boldest and most noteworthy, not only in Mulcaster, but of the whole company of educational writers between 1500-1650. The section on the subject is given below in full and verbatim.

There is no diverting to any profession till the student depart from the college of Philosophy, thence he that will go to Divinity, to Law, to Physick, may yet with great choice, to have the fittest according to the subject. He that will to the school [i. e. to school-teaching] is then to divert. In whom I require so much learning to do so much good, as none of the other three (honour alway reserved to the worthiness of the subject which they profess,) can challenge to himself more: either for pains which is great: or for profit which is sure: or for help to the professions: which have their passage so

much the pleasanter, the forwarder students be sent unto them, and the better subjects be made to obey them: as the schooling train is the track to obedience. And why should not these men have both this sufficiency in learning, and such room to rest in, thence to be choosen and set forth for the common service? be either children, or schools so small a portion of our multitude? or is the framing of young minds and the training of their bodies so mean a point of cunning? be schoolmaisters in this Realm such a paucity, as they are not even in good sadness to be soundly thought on? If the chancel have a minister, the belfry hath a master: and where youth is, as it is eachwhere, there must be trainers, or there will be worse. He that will not allow of this careful provision for such a seminary of masters, is most unworthy either to have had a good master himself, or hereafter to have a good one for his. Why should not teachers be well provided for, to continue their whole life in the school, as Divines, Lawyers, Physicans do in their several professions? Thereby judgment, cunning and discretion will grow in them: and masters would prove old men, and such as Xenophon setteth over children in the schooling of Cyrus. Whereas now, the school being used but for a shift, afterward to pass thence to the other professions, though it send out very sufficient men to them, itself remaineth too too naked, considering the necessity of the thing. I conclude therefore that this trade requireth a particular college, for these four causes. 1. First for the subject being the mean to make or mar the whole fry of our state. 2. Secondly for the number, whether of them that are to learn, or of them that are to teach. 3. Thirdly for the necessity of the profession which may not be spared. 4. Fourthly for the matter of their study which is comparable to the greatest professions, for language, for judgment, for skill how to train, for variety in all points of learning, wherein the framing of the mind, and the exercising of the body craveth exquisite consideration, beside the staidness of the person.

This "so great a good," as Mulcaster would say, for secondary schoolmasters is as yet delayed in England, though training for secondary schoolmistresses is so successfully carried out, e. g., in the Maria Grey Training College and in the Cambridge Training College.

Another point on which Mulcaster insists has only recently received attention:

The desirability of conferences.

Which I find [says he] to be four complements: parents and neighbours: teachers and neighbours: parents and teachers: teachers and teachers: whereof every one offereth much matter for the furthering of both learning and good manners in children. Under the name of neighbours I comprehend all foreign persons, whom either commendable duty by country law: or honest care of common courtesy doth give chargé unto, to help the bettering of children, and to fray them from evil.

A section is devoted to each of these "complements," showing how conference, "whether by way of asking counsel or by advertisement to check faults," is, in each case, very "profitable for the weal of the little ones."

1582.

The First Part of the Elementarie, which entreateth chiefele of the right writing of our English tung. Lond. 1582. 4to.

"The First Part" is all that Mulcaster published.

The following are Mulcaster's headings of the chapters of the Elementarie:

THE TITLES HANDLED IN THIS BOOK.

Why I begin at the Elementarie, & wherein it consisteth.....	Cap. 1.
That this five branched Elementarie is warranted by generall autoritie of all the gravest writers, & the best commonweals.....	Cap. 2.
The opinion of the best writers concerning the choice of wits fit for learning.....	Cap. 3.
That this Elementarie and the profitableness thereof is confirmed by great reason and the most evident proufs.....	Cap. 4.
That this Elementarie seasoneth the young mindes with the verie best and sweetest liquor.....	Cap. 5.
That this Elementarie maketh the childe most capable of most commendable qualities	Cap. 6.

That this Elementarie resemblenth natur both in number of abilities, and in manner of proceeding-----	Cap. 7.
That this Elementarie riddeth the course of the after learning from all difficultie and hardnesse-----	Cap. 8.
That this Elementarie by avoiding of ignorance avoideth all misliking-----	Cap. 9.
That the entrie to language and iudgment thereof by Grammar is the end of the Elementarie-----	Cap. 10.
The generall platform & method of the hole Elementarie-----	Cap. 11.
The method which the learned tungs used, in the finding out of their own right writing-----	Cap. 12.
That the English tung hath in it selfe sufficient matter to work her own artificiall direction for the right writing thereof-----	Cap. 13.
An answer to som pretended imperfections in the writing of our tung-----	Cap. 14.
What right in writing is, and of what force consent is in voluntarie inventions-----	Cap. 15.
The seven means to find out, and ascertain the right writing of English-----	Cap. 16.
Of generall rule, wherein the natur, and force of everie particular letter is examined-----	Cap. 17.
Of proportion 2-----	Cap. 18.
Of composition 3-----	Cap. 19.
Of derivation 4-----	Cap. 20.
Of distinction 5-----	Cap. 21.
Of enfranchisement 6-----	Cap. 22.
Of prerogative 7-----	Cap. 23.
The use of the generall table-----	Cap. 24.
The table-----	Cap. 25.
The conclusion of this treatis concerning the right writing of our English tung-----	Cap. 26.
Of the natur of an Elementarie institution-----	Cap. 27.

THE PERORATION.

To my gentle readers, and good cuntrimen, wherein manie things are handled concerning learning in generall: the natur of the English, and foren tungs besides som particularities concerning the penning of this, and other books in English.

The "Elementarie" ^a deals with school life up to twelve years of age, before the teaching of grammar (Latin) is begun. Now, Mulcaster boldly maintains *that the highest master should teach the youngest boys, and should receive the highest pay for so doing*. It is the foundation, well and soundly laid, which supports the whole building. "If I were to strike the stroke," says he, "as I am but to give counsel, the first pains truly taken should in good truth be most liberally recompensed; and less allowed still upward, as the pains [of teaching] diminish, and the ease increaseth."

The subjects.

The subjects he proposes "be" five in number—reading, writing (we miss arithmetic!), drawing, singing, and playing. In addition, always, and of the first importance, whatever will "strengthen their [the children's] bodies or quicken their wits." This liberal course Mulcaster grounds upon authority (Plato, Aristotle, Politian, etc.) and "probability," but he is aware that so full a course will not be "allowed of most." How modern this passage sounds! Mark the direct and dignified English, when Mulcaster lets himself go:

Who am I to persuade the liking of so full an Elementarie? * * * [It may be said to me]: "You meddle in this matter alone, you do but trouble yourself; you cannot turn the course which is ordinary and old, and therefore very strong for you to strive against; this thing which you commend is not every man's war; it will not be compassed; do you let it alone; if you will needs write, turn your pen to other matters, which the State will better like of: which this time will soon allow: which you may persuade with credit, if they be new and suitable; or confirm with praise, if they be old and need the file."

^a This account of the Elementarie is taken from a lecture given by myself before the College of Preceptors, London, Dec. 14, 1892, on "Richard Mulcaster and his Elementarie."

The winning of a "resolute good."

Mulcaster recognizes that this is the fate of everyone in "all attempts of turning." This is his answer:

To win a resolute good, he that wishes to have it must think to wrestle for it, both with words and writing, against corruption of the time, against the aloneness of attempt, against the prejudice of parties, against the difficulties of performance, and whatever else.

Then follows the curious passage:

May it not fall out that such a thing as this is may be called for hereafter, though presently not cared for, through some other occasion, which hath the rudder in hand. I had, therefore, rather that it were ready then, to help when it were wished for, than for fear of misliking, at the first setting forth, to defraud posterity of a thing so passing good.

Posterity has not interested itself to hear what Mulcaster has to say. Yet, in an age which has adopted free elementary education, it would not be inappropriate or unacceptable to have a reprint of the "Elementarie," for the twentieth century, that English people should judge for themselves if Mulcaster's ideas are "passing good."

Scope of the Elementarie.

Mulcaster planned his "Elementarie," not for all boys and girls, but for those who, by their quick conceiving, sharp wit, laborious courage, fast retaining, and honest disposition, showed themselves worthy of going on to the heights of learning. He would have every child taught reading and writing; but his "Elementarie" is, strictly speaking, a *foundation* for a higher course. Yet much of what he has to say is true for education which ceases at 12 or 13. Here is a rationale of his subjects: "By *reading* we receive what antiquity hath left us, by *writing* we deliver what posterity craves of us; by both we find great ease in every occasion of our daily use." Drawing trains the eye; music, established on arithmetic (one of Mulcaster's few references to arithmetic), helps to an appreciation of the beauty of concord and the blot of dissension even in a politic body, and, moreover, is the "natural sweeter of our sour life, in any man's judgment that is not too sour." (Ends proposed are human, not merely utilitarian. Man is the end, not the means.) Mulcaster insists on the training of the hand in writing, the eye in drawing, and the ear in music. He offers a psychology—of a somewhat crude kind, it is true—for the senses, the brain, "the prince of all our parts," and the soul. He also gives a rough account of the physiology of digestion and nourishment. It is interesting that he should make an essay toward a psychology, and that he should base his teaching on it, crude as it is.

First and best humanities.

He divides abilities into the *first humanities* and the *best humanities*. The former include all that is necessary for living; the latter refer to those induced by "train" or education, for *living well*. Of the *best humanities* he says—and this may stand as his

Definition of education:

They [the best humanities] form the senses and the instruments thereof to their best perfection and their longest endurance. They restrain desire to the rule of reason, and the advise of foresight. They so enrich the mind and the soul itself, as they lay up in the treasure of remembrance all arts, all forecast, all knowledge, all wisdom, all understanding, whereby either God is to be honoured, or the world to be served in honest and wise sort.

Method and necessity of the fore-train.

The training of the powers of children is done, so to say, surreptitiously. Mulcaster occasionally introduces stories to illustrate his point, and he tells

how Timotheus, the Athenian, gained his victories by the want of thought on the part of the enemy. He thinks, in the same way, the friends and teachers are to steal a march on unwary boys and girls and educate them, as he himself says, "ere themselves can perceive it." This precisely brings out Mulcaster's defect in the light of later pedagogy. He has no adequate idea of the responsive self-activity of the child as a pedagogic principle.

When, however, he speaks of the *necessity of the fore-train*, he is a modern of the moderns.

Is the compassing of tongues [languages] hard? sure so it is, to one of no fore-train, that never learned grammar, that never read writer, that never proved his stile [pen]. Be the mathematics hard? Sure so they be to one not prepared, that never did number, that never drew line, that never knew note, that never marked motion. Be the abilities of the body laborious and hard? Sure, that they be, where no exercise goeth before, where the joints be stiff, where it is painful to prove what the body can do, being never put to it.

Grammar in early education.

In connection with the necessity for this elementary foundation, there are two points in Mulcaster which are so much in accord with the best (I say best advisedly) modern education that I must mention them. First, he thinks the advantage of grammar teaching at an early stage is overrated.

The end of Grammar [he says] is to write and speak, which *when we do most*, we learn our grammar best * * *. As for the understanding of writers, that comes by years and ripeness of wit, not by rule of grammar.

Education and the workman.

Secondly, although the idea of universal education has not struck Mulcaster, yet he is exceedingly liberal in his view of the use of his elementary "foundation." After saying that, for the boy who is destined for learning, he will find nothing intolerably hard if he has a good fore-train: "Nay, what shall he find hard, though handicraft be his end? For he may well have all these [elementary] principles, yea, and the mathematics, too, and yet aspire no higher than the plain workman." In another passage he distinctly asserts that it is a mistake to suppose a handicraftsman can be satisfactory without sharp wits and good abilities.

Choice of wit limits students.

Is [a boy] poor? provide for him, that he may live by trade, but let him not loiter. Is he witty? why, be artificers fools? and do not all trades occupy wit?

The teaching of English.

Latin was, as we have seen, the learned tongue, and Mulcaster apologizes for his plea for the teaching of English. He says:

Our natural tongue being as beneficial to us for our needful delivery as any other is to the people which use it; and having as pretty and as fair observations in it as any other hath, and being as ready to yield to any rules of art as any other is, why should I not take some pains to find out the right writing of ours, as other countrymen have done to find out the like in theirs?

He returns again and again to this delightful theme. His joy in it is comparable to that of Columbus on seeing America. Mulcaster discovered the great merits of English as a language. How could he justify his pleasure to a learned world that, by tradition and use, only thought of Latin as a literary language? He must show, in the first place, its antiquity.

Antiquity of our tongue.

Our language can not be called young—

Unless the German himself [itself] be young, which claimeth a prerogative for the age of his [its] speech of an infinite prescription; unless the Latin and

Greek be young, whose words we enfranchise to our own use, though not always immediately from themselves, but most-what through the Italian, French, and Spanish; unless other tongues, which be neither Greek nor Latin, nor any of the forenamed, from whom we have somewhat, *as they have from ours*, will, for company's sake, be content to be young, that ours may not be old. But I am well assured that every one of these will strive for antiquity, and rather grant it to us than forego it themselves.

In bold, noble language, instinct with the patriotism of the Elizabethan age, Mulcaster speaks of the English nation as being of "good credit," even in the language of its detractors and enemies. He then shows that the matter of our speech is as significant and lofty as that of any other nation. He discusses, with admiration, the effect that chivalry must have had in increasing and refining our vocabulary. The inspiring effect of war, its true and untrue reports, its projects, devices, and multitude of discourses, are vigorously shown, and, finally, Mulcaster draws attention to the influence of trade in expanding ideas and in provoking apt expression.

If the spreading sea and the spacious land could use any speech, they would both show you where, and in how many strange places, they have seen our people, and also given you to wit that they deal in as much and as great variety of matters as any other people do, whether at home or abroad. Which is the reason why our tongue doth serve to so many uses, because it is conversant with so many matters, in so sundry kinds of dealings. Now all this variety of matter and diversity of trade make both matter for our speech and means to enlarge it.

Teaching of English.

Space does not permit me to give an account of Mulcaster's thoroughgoing attempt to expound the principles of English teaching. He divides his discourses and exposition into proportion, composition, derivation, distinction, enfranchisement, prerogative. He supplies a general table, in which he gathers together the words most commonly in use in Elizabethan speech. The whole treatment of English is so interesting that it is rather remarkable how the student of the English language usually manages to overlook the study of the "Elementarie."

Mulcaster addresses a long peroration to his readers at the end of his "Elementarie." In it he returns once more to the advocacy of the English language as a subject for teaching and as worthy of cultivation. He is a head master of a classical school, he is an able Latin writer, and yet his call to the study of English is the strongest thing of its sort in the last three hundred years.

English and Latin.

One passage more, the best known, from the peroration to the "Elementarie." It is on the value of the English *v.* Latin as a literary language:

Our own language bears the joyful title of our liberty and freedom, the Latin remembers us of our thralldom and bondage. I love Rome, but London better; I favour Italy, but England more. I honour the Latin, but I worship the English. * * * I honour foreign tongues, but wish my own to be partaker of their honour. Knowing them, I wish my own tongue to resemble their grace. I confess their furniture, and wish it were ours. Why should not all of us write in English? * * * I do not think that any language, be it whatsoever, is better able to utter all arguments either with more pith or greater plainness than our English tongue * * * not any whit behind either the subtle Greek for crouching close, or the stately Latin for spreading fair.

I will recall the main educational contentions of Mulcaster in the Positions and the Elementary:

1. Culture and learning for those who have the wit to profit by it, whether rich or poor. Adequate knowledge for those who go into trade.

2. Education for girls and women, as well as boys and men. Higher education for girls who have good abilities.
3. Training colleges for teachers.
4. Physical training for all—boys and girls, teachers and pupils, and this to be continued in after life.
5. Liberal education, with disinterested aims for the elementary schools.
6. The best masters to take the lowest classes.
7. Drawing and music to be taught in every school, not as “extras,” but as essentials.
8. Conferences between teachers, parents, and neighbors.

Note.—Besides the Positions and the Elementarie, the only other books the names of which are known are the “Cato Christianus” and the “Catechismus Paulinus.” Mr. Quick draws attention to a quotation from the former in the margin of Robotham’s preface to the “Janua.”

OTHER WRITINGS.

Mulcaster wrote some easy-going Latin verses to Elizabeth on her royal progress to Kenilworth in 1575.^a In 1573 he prefixed commendatory verses to John Baret’s *Alvearie*, and to the second edition in 1580, and in 1580 also to that remarkable schoolbook of Christopher Ocland called “Anglorum Prælia,” and in 1582 to the same writer’s *Ελληνισμὸς*. In 1575 he addressed more verses to Elizabeth, on her skill in music (printed in Tallis and Bird’s “Discantus Cationes,” 1575). Here is what Ballard (“Memoirs of British Ladies,” 1775, p. 158) quotes as a “handsome” compliment:

“Regia majestas, ætatis gloria nostra,
Hanc in deliciis semper habere solet:
Nec contenta graves aliorum audire labores,
Ipsa etiam egregie voce manumque canit.”

“Our gracious Queen, bright glory of our age,
The pow’r of notes harmonious can engage;
Much joy she thence receives, but more conveys,
While both her voice and hand the concert raise.”

In 1603 Mulcaster published:

Nania consolans in mortem Serenissimæ Reginæ Elizabethæ.

I have met with a translation of six of the verses of this Latin poem into English by Mulcaster himself (Collier: “Bibliographical Account of Early English Literature,” p. 542). They are not worthy of Spenser’s schoolmaster,

^a See Gascoigne’s “Princely Pleasures of Kenilworth” (pp. 9, 10, in reprint of 1821): “Her Majesty, proceeding towards the inner court, passed on a bridge, the which was railed in on both sides. And on the tops of the posts thereof were set sundry presents and gifts of provision—as wine, corn, fruits, fishes, fowls, instruments of music, and weapons for martial defence. All which were expounded by an actor clad like a Poet, who pronounced these verses in Latin:

Jupiter, è summi dum vertice cernit Olympi,
Huc, Princeps Regina, tuos te tendere gressus:
Scilicet eximie succensus imagine formæ,
Et memor antiqui qui semper ferverat ignis,
Siccine Cœlicolæ patientur turpiter (inquit)
Muneris exortem Reginam hoc visere castrum,
Quod tam læta subit? Reliqui sensere tonantis
Imperium superi, pro se dat quisque libenter:
MUSICOLAS Sylvanus aves; Pomonaque poma,
Fruges alma Ceres, rorantia vîna Lyæus;
Neptunus pisces, tela et tutantia Mavors:
Hæc (Regina Potens) superi dant munera divi:
Ipse loci dominus dat se Castrumque Kenelmi.

“These verses were devised by Master Mulcaster.”

but I give them as illustrating a heroic struggle to say something in English, at any cost:

"As good Elizabeth raignes most happle now in heaven,
So happy may King James raigne long with us on earth;
And as she did avoid the Jesuites' treacherous traines,
Whereby she got her grave in dire and quiet death,
So good King James goe late to God, and slip their snares;
For if thou stick'st to God, they'l not sticke to sticke thee."

Here we see Mulcaster at his very worst. He has forgotten his metre, and writes the atrocious pun on "stick." Yet Collier, while recognizing the faults, would have us observe that these lines are interesting, as one of the early specimens of English blank verse prior to Milton.

BOOKS ON THE RELATION OF CHILDREN AND ADULTS.

1. Batty [Bartholomew]. Christian Man's Closet. Englished by W. Lowth. 1581.
Other Books on Parents and Children.
2. Newnam's Nightcrowe. 1590.
3. James I's Βασιλικόν Δώρον. 1603.
4. Martyn (Wm.) Youth's Instruction. 1612.
5. Ayrault (P.). Translated by J. Budden. A Discourse for Parents, etc. 1614.
6. Dod's Bathsheba's Instructions. 1614.
7. Precepts, by Lord Burleigh. 1617.
8. Father's Advice to his Sonne, by Patrick Scot.
9. Mother's Blessing, by Mrs. Dorothy Leigh.
10. Mother's Legacie, by Mrs. Jocelin.
11. Emperor Basil, translated by Scudamore (Jas.). 1638.
12. Sir Walter Raleigh to his Son. 1632.
13. Cardinal Sermonetta. 1633.
14. Henry Delaune. Πατρικόν Δώρον. 1651.

BARTHOLOMEW BATTY (TRANSLATOR, WILLIAM LOWTH).

1581.

*The Christian mans Closet. Wherein is contained a large discourse of the godly training up of children; as also of those duties that children owe unto their parents * * *. Englished by William Lowth. B. I. Thomas Dawson and Gregoric Seton. 1581. 4to.*

This volume is divided into two books:

1. The duty of parents toward their children.
2. The duty of children toward their parents.

It is thrown into the form of a dialogue in which the following take part: Amusus, Theodidactus, Theophilus, Martina, the mother.

Of the two parts, probably the first is of more importance than the second. The following are among the points brought forward: The misery of a disorderly family. The wife and the family. God's command to nurture children. Parents are stirred up to instruct their children with sweet promises. We must not deal with youth by threatenings and stripes. Examples of godly fathers and how they brought up their children. The best schoolmaster should be chosen. Children must be taught from their tender years. The things to be taught to children—especially the subject-matter of the Apostles' Creed. Children ought to be instructed for four reasons: (1) To receive the seeds of godliness; (2) to love and learn liberal sciences; (3) to lead honest and virtuous lives; (4) to learn good manners. Recreation must be used. Parents should spare no labor in teaching their children. To be among children is to be in the midst of angels.^a Nothing ought to seem troublesome and grievous

^a "For their angels, saith Christ, do always behold the face of my father which is in heaven. If all parents did understand this excellencie and dignity given unto them, with what pleasure and cheerfulness would they teach their children."

unto parents, schoolmasters, and pastors, and all others that have charge of children and youth. Schoolmasters should be godly, and a man must not bestow his whole study in one art only. The efficacy of education. We must not leave off instruction on account of the stupidity of wit. Of the ordering of noble wits. "Correction" (punishment) is necessary. Fathers abuse their authority by too great severity. A mean in correcting is best. Fourteen causes for which a parent may justifiably disinherit his son. "Cocking" is the original cause of negligent instruction. Negligent parents are injurious to their country and commonwealth. What and how great mischiefs do arise by negligent instructing. Negligent parents do exceed in cruelty Pharaoh, Herod, or any other tyrants. Whether negligent parents are to be compelled by any law? The law of Solon against negligent parents. Children bear the sins of parents. Riches are not to be heaped up for children, but a good name is better than riches. The pains of studies are not to be remitted. A handicraft, science, or faculty is to be learned by all.^a The manner and order how to "terrify" children (relate, for instance, "the horrible pains and plagues" which come from God's anger). Whether children ought to be sent into strange countries to learn the liberal sciences. Mothers ought to nurse their own children. What company a child ought to use, and what playfellows he must have. Women get great[er] renown in the good and virtuous education of their children than by the curious garnishing of themselves. The death of children to be borne moderately. Parents ought to take great heed that they choose godly wives for their sons.

The second book, concerning the duty of children toward their parents, is divided into five parts: I. What manner of honor and obedience children ought to show to parents. II. The honesty, profit, and necessity of teaching, and true wisdom. III. Shunning of vices and embracing of virtues. IV. Matrimony, and how a young man shall contract himself therein. V. Worthy and excellent sentences collected out of the best and purest authors.

It will be noted that the subjects mentioned above are disconnected. This, indeed, is a noticeable characteristic of the book. It goes from one point to another without any clear order. It displays, however, very great industry in its collection of quotations and stories to illustrate the different points, and is at least interesting in insisting (as did Erasmus) upon the importance of teaching children from infancy.

OTHER BOOKS ON PARENTS AND CHILDREN.

In Andrew Maunsell's catalogue of books, published in 1595, Lowth's translation of Bartholomew Batty's book is named, together with the following:

A rule to bring up children: a treatise wherein is declared, how the father opposeth the son in the holy scripture. Whereby all parentes may be taught how to bring up their children. By John Lister. Printed by Thomas East. Svo.

Celius Secundus Epistle, for the godly bringing up of children. Translated by William Lyring. Printed by John Alde. 1576. Svo.

Exhortation and fruitful admonition to virtuous parentes and modest Matrones, to the bringing up of their children in godly Education and household discipline. By R. G. Printed for Nic. Ling. 1584. Svo.

I have not been able to see any of the above.

^a The reason given is: "For goods oftentimes are taken from a man by some mishap or chance, as by fire, theft, war, shipwreck or for some fault or offense; but an art or occupation is the surest possession which always and in any place is ready to comfort and relieve a man in his necessity whatsoever."

The following books, further, are taken from W. Carew Hazlitt's bibliographical collections :

The Civilltie of Childrehode, with the discipline and institution of Children etc. translated oute of French into Englysh by Thomas Paynell Anno Do. 1560. (Svo. 55 leaves.)

The counsell of a Father to his Sonne, in ten severall Precepts. Left as a Legacy at his death. London. Printed for Joseph Hunt and are to be sold at his shop in Bedlem, neere moore-field gate (circa 1620). A sheet. In verse.

The Mothers Counsell or, Live within Compasse. Being the last Will and Testament to her dearest daughter. Printed at London for John Wright, and are to be sold at his Shop in Gilt-spur street without Newgate at the signe of the Bible. 16—. Svo. 24 leaves, the last blank. Woodcut on title.

The Country-Mans Care, And the Citizens feare, In bringing up their children in good Education. Set forth in a Dialogue between a Citizen and Country-Man. Printed at London for T. B. 1641. 4to. 4 leaves.

A pleasant and shady pathe for the bringing up of yonge children. Licensed to Edward White. 3 Oct. 1580.

NEWNAM'S NIGHTCROWE.

1590.

Newnam's Nightcroue. A Bird that breedeth brauncles in many Families and Householdes. Whercin is remembered that kindly and provident regard which Fathers ought to have towards their Sonnes. Together with a disciphning of the injurious dealings of some younger sorte of stepdames. John Wolfe 1590. 4to.

The Table :

Part I.

CHAP. I. That the virtue, thriving and prosperity of children are for the most part wrought by the father's good examples and instructions.

CHAP. II. That the vice and other infelicity of children, mostly proceedeth of the father's ill examples.

CHAP. III. That fathers ought not to provoke their children to wrath or disobedience.

CHAP. IV. That fathers ought to deal kindly and faithfully, and not prejudicially or fraudulently towards their children.

CHAP. V. That fathers or parents ought not to dispose their goods or lands after private fancy.

Part II.

CHAP. VI. Of the ungentle dealing of some stepmothers towards their husband's children.

CHAP. VII. That stepmothers ought not to be private or false accusers of their husband's children more than of others.

CHAP. VIII. That stepmothers ought not to supplant or procure disheriting of their husbands eldest sonnes.

CHAP. IX. That disinheriting of the eldest son without very great lawful cause is an art very wrongful and ungodly.

CHAP. X. That procurers and counsellors of disherision and all wrong doing ought to make or procure restitution.

JAMES I.

1599.

ΒΑΣΙΛΙΚΟΝ ΔΙΟΝΟΝ, Or, His Majesties Instructions to his dearest sonne Henry, the Prince. 1599.

Other editions : London : 1603. Another edition 1603, 1604, 1624, 1630. Edinburgh : 1603. Stockholm : 1606. Paris : 1603, 1604. Frankfort : 1679. Roxburgh Club Reprint, 1887. Included in a Miscellany in Henry Morley's Universal Library, 1883.

The treatise is divided into three parts: 1. Of a King's Christian duty towards God. 2. Of a King's duty in his Office. 3. Of a King's behaviour in indifferent things.

The conclusion of the whole treatise.

Remember, my son, by your true and constant depending upon God, to look for a blessing to all your actions in your office: by the outward using thereof, to testify the inward uprightness of your heart; and by your behaviour in all indifferent things, to set forth the vive [=lively] image of your virtuous disposition: and in respect of the greatness and weight of your burdens, to be patient in hearing, keeping your heart free from pre-occupation; ripe in concluding, and constant in your resolution. For better it is to bide at your resolution although there were some defect in it, than by daily changing, to effectuate nothing; taking the pattern thereof from the microcosm of your own body: wherein ye have two eyes, signifying great foresight and providence with a narrow looking in all things; and also two ears, signifying patient hearing and that of both the parties: but ye have but one tongue for pronouncing a plain, sensible, and uniform sentence; and but one head, and one heart, for keeping a constant and uniform resolution, according to your apprehension: having two hands and two feet, with many fingers and toes for quick execution, in employing all, instruments meet for effectuating your deliberations.

After warning his son against anger, James continues: "Above all let the measure of your love to everyone be according to the measure of his virtue." He advises his son to adopt "the wise man's schoolmaister, which is the example of others * * * eschewing so the over-late repentance by your own experience, which is the schoolmaister of fools" (an echo from Roger Ascham).

WILLIAM MARTYN.

1612.

Youth's Instruction. Composed and Written by William Martyn, Esquire, Recorder of the honourable Citie of Exeter. Præstat non nasci; Quam male vivere. London, Printed by John Beale, 1612. 4to. Also, 1613.

Addressed to his son "Nicholas Martyn, now a Student in the University of Oxford."

This love of mine (my son) [says Martyn] hath made me over-bold with mine own business, and with mine own convenient pleasures; in borrowing some hours (which were indeed owing to my public employments and to my necessary recreation) to compose, and to write this ensuing Discourse; not to please myself, (if it were praiseworthy) but to do you good: and (by such Motives, and by such Instructions, as are therein comprised) to enrich your understanding and behaviour, with those selected virtues, and most commended qualities, whose discourse it doth contain.

After citing instances of godly and wise men, Martyn treats of study and learning.

Hard labour and daily study.

He that is learned, treasureth up wisdom, whereby he effecteth what he listeth; yea, things justly to be admired, and to be wondered at. This fair and this lovely Lady cannot be won, but by an industrious care and by a constant suit, and she is overtaken by such only, as with daily labour and study do follow after her. Therefore, (my son) if you desire to be her companion, you must (by frequent study) attempt to procure, and to win her love. *Nemo enim nascitur Artifex*, Learning is not obtained without labour, and *labor improbus omnia vincit*, as saith the poet, by hard labour, and daily study, we always do step nearer unto learning.

The rule for study.

Let your study, therefore, be moderate, not violent, more pleasing than painful, that sanity, and health of body may (with study, and with learning) be preserved and maintained, *nam frustra sapit, qui sibi non sapit*: you shall in vain think to make yourself to be profitable unto others by your learning, if you be not careful (by moderating of your studies) to provide for your own health.

The best time for study.

It is true, that for the attaining of learning, *Melior est vigilantia somno*: We must not be slothful or sluggish, but we must watch: But not too much, in the night. For night watchings in study are dangerous and hurtful, both to the wit, and also to the eyes: yea, they are generally prejudicial unto the state of the whole body. The mornings must therefore be the choicest, and chiefest times in which I counsel you to spend, and to employ your labours in those studies, and in those projects which by your religious, learned, and honest tutor (Mr Hanniball Gamon) shall (for your best furtherance in knowledge and in learning) be appointed to you, which times (I am right well assured) you can with the more facility, and alacrity employ therein; because you have heretofore been trained and enured so to do by the provident care, and directions of your last sufficient and kind schoolmaster (Mr William Periman).

Amongst the subjects specially treated are: Wisdom, The Choice of Company, Rules in Friendship, Honesty of Life, Modest talking, Idleness, Banqueting, Drunkenness, Humility, Humanity, Adversity, Patience, Eight rules of Liberality, Card and Dice-playing, Dancing and Vaulting, Rules for Speaking well, Truth, Rashness, Exercises.

As to the last named, Martyn especially recommends his son to read the work of Balthazer Castilion.

PETRUS ÆRODIUS (=PIERRE AYRAULT).

1614.

A Discourse for Parents honour and authoritie. Written respectively to reclaim a young man that was a counterfeit Jesuite: By his Father Petrus Ærodius the renowned French Civilian, sometimes Justice in causes criminal and Master of Requests to the Duke of Angiers. Done into English at the instance of some worthy learned friends by Jo: Budden Doctor of the Lawes and his Majesties Professor in the University of Oxford. London: Printed by Edw. Griffin, for William Harper, and Thomas Harper, 1614.

This English translation of "a most excellent Latin original treateth for the honourable maintenance of parents' authority, and was compiled some five and twenty years since by the famous French civilian Petrus Ærodius, in purpose to reclaim his son Renatus, who at that time, being under age, and without his father's leave, had betaken himself to the Jesuits' company." (Petrus Ærodius= Pierre Ayrault.)

JOHN DOD AND WM. HINDE.

1614.

*Bathsheba's Instructions to her son Lemuel: * * * Exposition of the last chapter of Proverbs * * * Penned by a godly and learned man, now with God. Perused and published for the use of God's Church. By John Dod and Wm. Hinde. London. John Beale, 1614. 4to.*

This is a sermon one part of which is to show that it is the duty of parents to teach and instruct their children, and that it is the children's duty firmly to retain in memory the instruction and precepts of their parents.

Very tedious.

LOED BURLEIGH.

1617.

Certaine Precepts, or Directions, for the well ordering and carriage of a mans life: as also æconomically Discipline for the government of his house: with a platforme to a good foundation thereof in the advised choice of a Wife: Left by a Father to his son at his death, who was sometimes of eminent Note and Place in this Kingdom. And Published from a more Perfect Copy, than ordinary those pocket Manuscripts go warranted by. With some other Precepts and Sentences of the same nature added: taken from a per-

son of like place and qualitie. London, Printed by T. C. and B. A. for Ri. Meighen and Thom. Jones, and are to be sold at St. Clement's Church without Temple Barre 1617.

Also, editions in 1636, 1637, 1728, 1783, 1821, 1824, and probably many others. The following are the subjects of the Precepts:

1. For choice of your wives. 2. The education of children. 3. For Household provision and the choice of Servants. 4. How to entreat your kindred and allies. 5. Advise to keep some great man to your friend and how to compliment him. 6. How and when to undertake suits. 7. Advise to suretyship. 8. How to behave a man's self. 9. How far to disclose a man's secrets. 10. Be not scurrilous in conversation.

PATRICK SCOT.

1620.

A Father's Advice or last Will to his Sonne, Affording matter profitable for all men, now published for the use and benefit of every one, and more particularly for the Inhabitants of Great Britaine and Ireland. Lond. 1620. 4to.

In the introduction Scot says:

I doe find (by the Law Falcidia) if the Child committeth any fault for want of Education, the Father was punished.

That I should not bee lyable to that (and a more supreme) Law, I have (from your Infancy) been carefull to have you sufficiently grounded in these Rudiments, that doe concerne both your spirituall and Civill conversation.

MRS. DOROTHY LEIGH.

1621.

The Mother's Blessing; Or The godly Counsell of a Gentle-woman, not long since deceased, left behind her for her Children. Containing many good admonitions profitable for all Parents, to leave as a Legacy to their Children. By Mrs Dorothy Leigh.

The earliest edition in the British Museum library is the seventh, dated 1621, 12mo. Other editions are the tenth (1627), the fifteenth (1630), and 1656, 1663, 1707, 1718.

Mrs. Leigh gives seven "causes," or reasons, which induced her to write this book. The sixth of these is to persuade her sons, as one of their bounden duties—

To teach their children.

[So] that all your children be they males or females may in their youth learn to read the Bible in their own mother-tongue, for I know it is a great help to true godliness. And let none of you plead poverty against this * * * If any at any time desire you to be a witness to the baptising of their child, [I desire] that then you shall desire the person so desiring to give you his faithful word, that the child shall be taught to read, so soon as it can conveniently learn, and that it shall so continue, till it can read the Bible. If this will not be granted, you shall refuse to answer for the child.

The education of the child: A mother's view, 1621.

I further entreat you that all your children may be taught to read, beginning at four years old or before and let them learn till ten, in which time they are not able to do any good in the Commonwealth, but to learn how to serve God, their King and country, by reading. And I desire, entreat, and earnestly beseech you, and every one of you, that you will have your children brought up with much gentleness and patience. What disposition soever they be of, gentleness will soonest bring them to virtue; for forwardness and curstness doth harden the heart of a child and maketh him weary of virtue. Among the froward thou shalt learn frowardness; let them therefore be gently used and always kept from idleness, and bring them up in the Schools of learning, if you be able, and they be fit for it. If they will not be scholars, yet I hope they will be able by God's grace, to read the Bible, the Law of God, and

be brought to some good Vocation or Calling of life. Solomon saith, (Pro. 22. 6), Teach a Childe, in his youth, the trade of his life, and he will not forget it, nor depart from it, when he is old.

ELIZABETH JOCELIN.

1624.

The Mothers Legacie, To her unborn Childe. By Elizabeth Jocelin. London, Printed by John Hariland, For William Barret 1624. 12mo. 3rd ed. 1625; 1684; 1724; 1840; 1852; 1853. Also, a translation into Dutch in 1699.

This lady died at the age of 27 years, surviving the birth of a daughter nine days. The treatise is one of great piety, is written with language breathing of devotion. The treatise has lately been reprinted (Macmillan & Co., 1894) with a preface by the Lord Bishop of Rochester. The contents are touchingly earnest.

In the epistle dedicatory (to her husband Tourell Jocelin) is the following:

Mrs. Jocelin's view of woman's education.

I desire (if the child be a daughter) her bringing up may be learning the Bible, as my sisters do, good housewifery, writing and good works: other learning a woman needs not: though I admire it in those whom God hath blest with discretion, yet I desired not much in my own, having seen that sometimes women have greater portions of learning, than wisdom, which is of no better use to them than a main-sail to a fly-boat, which runs it under water. But where learning and wisdom meet in a virtuous disposed woman, she is the fittest closet for all goodness. She is like a well-balanced ship that may bear all her sail. She is—Indeed, I should but shame myself, if I should go about to praise her more.

This is entirely a religious exhortation. Mrs. Jocelin is aware that her earnestness may be taken for strictness, and says:

Mistake me not, nor give yourself leave to take too much libertie with saying, My Mother was too strict. No, I am not, for I give you leave to follow modest fashions, but not to be a beginner of fashions: nor would I have you follow it [them] till it be generall. So that in not doing as others do, you might appear more singular than wise: but in one word, this is all I desire, that you will not set your heart on such fooleries, and you shall see, that this modest carriage will win you reputation and love with the wise and virtuous sort.

EMPEROR BASIL (JAS. SCUDAMORE, TRANSLATOR).

1638.

The Sixty-six admonitory Chapters of Basilus, King of the Romans, to his Sonne Leo, in Acrostic manner: That is, the first letter of every chapter, making up his name and title. Translated out of Greeke by James Scudamore. Printed at Paris, 1638.

Basilius succeeded Michael in the Eastern Empire in 870, and reigned 19 years.

Basilius, "by Christ, King of the Romans," to Leo his beloved son, and co-emperor. The first chapter is on the value of instruction. Then follow chapters on:

Right faith, Honour to priests, Judgment and retribution to come, Of alms, Of care and vigilance, Of conversation with good men, Of virtue, Of lust, Of goodness of manners, Of temperance, Of faithful friends, Of valour and prudence, Of humility, Of prudence, Of truth and lying, Of meditation of divine oracles, Of counsel, Of chastity, Honour to parents, Justice, Bounty, Friends, Contempt of riches, Drunkenness, Making a friend, Riches and covetousness, Patience, Government, Making good laws, Of naughty men, Mercy, Speech and silence, That all things here are unstable, Care, Guard, Kingdom of heaven, Of remembering God, Of receiving gifts, Injustice, Magistrates, Peace, Praise, Of care to be had of thyself, Compassion, Gentleness, Returning thanks to God, Bodily beauty, Curing of the soul, Backbiters, Good books, Bounty, Nobility, Patience, Education of children, Hurt that comes from the tongue, Goodness, Restraining pleasure, Perfect reason, Of being not lifted up in mind.

Some of the chapters repeat the same subjects.

SIR WALTER RALEIGH.

1632.

Instructions to his Son and to Posterity. To which is subjoined: *The dutiful Advice of a Loving Son to his aged Father.* London, 1632. 12mo.

Other editions 1636, 1651, 1656, 1722, 1728. These editions are mentioned by writers, but are not all in the British Museum.

Chapters:

- I. Virtuous Persons to be made choice of for Friends.
- II. Great care to be had in the choosing of a wife.
- III. Wisest Men have been abused by Flatterers.
- IV. Private Quarrels to be avoided.
- V. Rules for keeping an Estate:
 1. Know what thou hast.
 2. Never spend anything, before thou have it.
 3. Never be surety for another.
- VI. The Fittest sort of Servants.
- VII. Brave rags wear soonest out of Fashion.
- VIII. Riches not to be sought by evil Means.
- IX. Inconvenience from Delight in Wine.
- X. Let God be thy Protector and Director in all thy actions.

CARDINAL SERMONETTA.

1633.

Instructions for Young Gentlemen; or The Instructions of Cardinall Sermonetta to his Cousin Petro Gactano, at his First Going into Flanders to the Duke of Parma, to serve Philip, King of Spaine. Oxford, Printed by John Lichfield for Thomas Huggins. Anno Dom. 1633.

The Printer to the Reader says: "For the matter itself, the only complaint is, that it is so short, which I suppose may be somewhat supplied by reading it often; *nec satis est legisse semel.*" The title sufficiently describes the book, but it may be added that though religious in origin, it is rather toward practical worldly wisdom that it is directed. One of the points suggested is the keeping of a diary.

I did put your Lordship in mind here at Rome to keep a diary. I do now again put you in mind of it, for your own benefit: you may make a book to write such things in as happen from day to day; wherein you shall write not only the successes, but also the manner and causes of them. For (as you know) every action hath its original upon some advice, and he that putteth in execution, keepeth or at least, ought to keep within certain bounds. And thus may your Lordship by all this your pains and travails with speed obtain the ability and valour, which yet you want.

HENRY DELAUNE.

1651.

[*Πατρικόν Δώρον.* Or,] *a Legacie to his Sonnes.* By Henry Delaune, London, 1651. 8°. Second edition, London, 1657. 8°.

WILLIAM BULLOKAR.

1580.

Bullokars Booke at large, for the Amendment of Orthographie for English speech: wherein a most perfect supplie is made, for the wantes and double sounde of letters in the olde Orthographie, with Examples for the same, with the easie conference and use of both Orthographies, to save expences in Bookes for a time, untill this amendment grow to a generall use, for the easie, speedie and perfect reading and writing of English, (the speech not changed, as some untruly and maliciously, or at the least ignorantlie blouce abroad) by the which amendment the same Authour

hath also framed a ruled Grammar, to be imprinted heereafter, for the same speech, to no small commoditie of the English Nation, not only to come to easie, speedie and perfect use of our owne language, but also to their easie, speedie and readie entrance into the secretes of other Languages, and easie and speedie pathway to all Straungers, to use our Language, heeretofore very hard unto them, to no small profite & credite to this our Nation, and stay thereunto in the weightiest causes. There is also imprinted with this Orthographie a short Pamphlet for all learners, and a Primer agreeing to the same, and as learners shall go forward therein, other necessarie Bookes shall speedily be provided with the same Orthographie. Hercunto are also ioyned written Copies with the same Orthographie.

Give God the praise, that teacheth alwaies.

When truth trieth, error flieth.

Scene and allowed according to order. Imprinted at London by Henrie Denham. 1580. (4to. 59 pp.)

The preface to this long-titled book is headed "Bullokar to his Countrie." In this Bullokar states that he had not, when he wrote his book, seen works on the same subject by Sir Thomas Smith and Master Chester, otherwise he would have offered them his services in orthography.

The voyce should give names to letters.

But yet I have founde by handling of mine owne children (whome I have used to mine owne liking in teaching them true Ortography written, for lacke of the printed) that reading and writing may be had perfectly, in the time that my helpes before used could be perfectly conceyved and halfe followed, by reason that in true Ortography, both the eye, the voyce, and the eare consent most perfectly, without any let, doubt or maze. Which want of concord in the eye, voice, and eare, I did perceyve almost thirtie yeares past, by the very voyce of children, who guided by the eye with the letter, and giving voyce according to the name thereof, as they were taught to name letters, yelded to the eare of the hearer a cleane contrary to the word looked for.

Of xxxvii parts scant six perfect.

Hereby grewe quarels in the teacher, and lothsomenesse in the learner, and great payne to both: and the conclusion was, that both teacher and learner must go by rote, or no rule could be followed, when of xxxvii partes, xxxi kept no square, nor true joint. For xiii parts greatly needefull, lacked altogether, or were furnished with the other xxiiii partes, by peeing and contrary hewing of which xxiiii (if they be well viewed) they are so mangled, that there are but sixe partes in perfect use: whereof (as occasion hath offered) I have complayned to divers of the art of learning, whereunto some have yelded, some not conceyved of it, some loth to graunt it, and some old customaries could not abide to heare of any spedie way to knowledge, were it never so good.

AUTHORITIES ON EARLY ENGLISH PRONUNCIATION.

On Early English Pronunciation, With especial reference to Shakespeare and Chaucer; containing an investigation of the Correspondence of Writing with Speech in England from the Anglo-Saxon Period to the present day, preceded by a systematic notation of all spoken sounds by means of the ordinary Printing Types. By Alexander J. Ellis F.R.S. For the Philological Society. Part I, 1869; Part II, 1869; Part III, 1871; Part IV, 1875; Part V, 1889.

The authorities named by Mr. Ellis between 1500 and 1660 in this subject are the following:

1530. John Palsgrave.
Les clarcissement de la Langue Francoyse. Lond. To the French reprint is added a reprint of: (c. 1532) *An Introductory for to lerne to read, to pronounce and to speke French trewly.* By Giles du Guez or du Wes. Written for the Princess Mary daughter of Henry VIII.
1545. Louis Meigret.
Traité touchant le commun usage de l'escriture françoise, Paris.
1547. W. Salesbury.
*A Dictionary in Englyshe and Welshe * * * London.*
1550. Loys Meigret.
Le tretté de la Grammere Francoeze. Paris.
1555. Sir John Cheke.
*De pronuociatione Græcæ * * * Lingua.* Basle.
1567. W. Salesbury.
*A playne and familiar Introduction teaching how to pronounce the letters in the Brytische tongue, now commonly called Welsh * * * London.*
1568. Sir Thomas Smith.
De recta et emendata linguæ anglicæ scriptione, dialogus, Thoma Smitho Equestris ordinis Anglo authore. Lutetiæ. Ex officina Roberti Stephani Typographi Regii. Paris. folio, 44 folios. Colophon dated 13 Nov. 1568.
1569. John Hart.
*An Orthographic, conteyning the due order and reason, howe to write or painte thimage of mannes voice, most like to the life or nature. Composed by J. H. Chester, Heralt * * * 1569. Lond. 12mo.*
1570. Peter Levins.
Manipulus Vocabulorum: a Rhyming Dictionary of the English Language. 4to.
1573. John Baret.
An Alvarie or Triple Dictionarie.
1580. William Bullokar.
Booke at large.
1611. Randle Cotgrave.
A Dictionarie of the French and English Tongues. London, imprinted by Adam Islip. Fol.
1611. John Florio.
Queen Anna's New World of Words, or Dictionarie of the Italian and English tongues, collected, and newly much augmented by J. F., Reader of the Italian unto the Sovereigne Majestie of Anna, crowned Queene of England, Scotland, and Ireland etc. and one of the Gentlemen of her Royall Privie Chamber. Whereunto are added certaine necessarie rules and short observations for the Italian tongue. Fol.
1619. Alexander Gill. 2nd ed. 1621.
Logonomia Anglica. Quâ gentis sermo facilius addiscitur Conscripta ab Alexandro Gil, Paulinæ Scholæ magistro primario. Secundò edita, paulò correctior sed ad usum communem accommodatior. Sm. 4to.
1633. Charles Butler.
The English Grammar, or the Institution of Letters, Syllables, and Words in the English tongue. Whereunto is annexed an Index of Words Like and Unlike. Oxford. 4to.

1640. Ben Jonson.
The English Grammar. Fol.
1646. Thomas Gataker.
De Diphthonis Bircalibus, deque Literarum quarundam sono germano, naturâ, genuinâ, figurâ, novâ, idoneâ, scripturâ veteri verâque. Lond. 24 p.
1651. Thomas Willis.
Vestibulum Linguae Latinae.
1653. Written by John Wallis, the mathematician.
Joannis Wallisii Grammaticae Linguae Anglicanae Cui praefigitur De Loquela; sive de sonorum omnium loquelarium formatione: Tractatus Grammatico-Physicus. Editio Sexta. 1765. First ed. 1653; 2nd, 1664; 6th, 1699; the Oxford reprint of this edition, 1765.

EARLY BOOKS ON THE TEACHING OF ENGLISH.

The following books written from the point of view of teaching English should also be added to the list of authorities from whom Mr. Ellis obtained his material.

1594.
*Grammatica Anglicana, praecipue quatenus a Latina differt, ad unam P. Rami Methodum concinnata * * * authore P. G. [P. Greenwood?] Vocabula Chauceriana quadam selectiora * * * ipse hodie Poetarum deliciae, una cum eorum significatis * * * eodem authore J. Legatt: Cantabrigiae 1594. 8vo. (pp. 36).*

1624.
A Perfect Survey of the English Tongue, taken according to the Use and Analogue of the Latine. And serveth for the more plaine exposition of the Grammaticall Rules and Precepts, collected by Lillie, and for the more certaine Translation of the English tongue into Latine. Together with sundry good demonstrations by way of Sentences in either tongue. Written and collected by Io: Hewes, Master of Arts. Principiis cognitis, multo facilius extrema intelligitur. Cic. pro Cluentio. London. Printed by Edw. Allde, for William Garret. 1624. 4to.

With 16 pages at the end of: "The Author his Counsel and Exhortation to his beloved Pupils, and those of all Ages."

In Hewes's preface to the Lord Bishop of London he makes use of the much used—

Comparison of education to gardening.

As it happeneth to the skilful Gardener, where he hath committed his seeds and plants to the earth, that still as the same begin to spring up to open show, so fast again doth his labour and toil increase upon his hands: so fareth it * * * with the like poor and unrespected, yet necessary state of Schooling and managing of Youth, that all the labours of the Teacher, are little enough to order, polish and refine, that once he hath taken in hand to perform and execute.

1640. Simon Daines.
Orthocopia Anglicana; or the first principall part of the English Grammar Teaching the Art of right speaking and pronouncing English, With certaine exact rules of Orthography, and rules of spelling or combining of Syllables, and directions for keeping of stops or points between sentence and sentence. A work in it self absolute, and never knowne to be accomplished by any before: No lesse profitable then necessary for all sorts, as well Natives as

Forreigners, that desire to attaine the perfection of our English Tongue. Methodically composed by the industry and observation of Simon Daines, Schoolemaster of Hintlesham in Suffs. Perficit omnia tempus. London. Printed by Robert Young and Richard Badger for the Company of Stationers, Anno Domino 1640. 4to. (96 pp.)

1643-1649. Richard Hodges.

1. *A Special Help to Orthographic: or The True Writing of English. Consisting of such Words as are alike in Sound, and unlike both in their signification & Writing &c. Lond. 1643. 4°.*

2. *The English Primrose * * * by the ful sight whereof there will manifestly appear the easiest * * * way both for the true spelling & reading of English, as also for the True-writing thereof, etc. Lond. 1644. 8°.*

3. *The Plainest Directions for the True-Writing of English, That ever was hitherto publisht * * *. Invented by Richard Hodges, a wel-wisher to Learning. London. 1649. 8°.*

4. *The Plainest Directions for the True Writing of English, That ever was hitherto publisht: Especially of such Words whose Sounds are altogether Alike, & their Signification altogether Unlike: And of such whose Sounds are so neer Alike that they are oftentimes taken one for another. Whereunto are added divers useful Tables. Invented by Richard Hodges, a wel-wisher to Learning. Lond. 1649. 12°. [Printed by Wm. Dugard for Thomas Euster at the Gun in Ivie Lane.]*

1655. J. Wharton.

A New English Grammar; Containing All Rules and Directions necessary to be known for the judicious Reading Right speaking and Writing of Letters, Syllables and Words in the English Tongue. Very usefull for Scholars before their entrance into the Rudiments of the Latine Tongue. With Directions for the use of this Book in Schools. Likewise for Strangers that desire to learn our Language, it will be the most certain Guide, that ever yet was extant. Composed by J. Wharton, Mr of Arts. London: Printed by W. Dugard, for Anthony Williamson, at the Queens Arms in S. Pauls Churchyard 1655. 8vo. (pp. 109.)

In his address to the courteous reader, Wharton gives utterance to an—
Appreciation of the English language.

Our mother-tongue * * * is as capable of any scholar-like expressions, as any whatsoever. Besides the purity and elegance of our own language is to be esteemed a chief part of the honour of our Nation, which we all ought to our utmost power to advance. Lastly, because for one that is trained up in the Grammar Schools to any perfection, fit for the University, or any learned Profession, a hundred are taken away before; of whom the most, very shortly after, wholly in a manner, forget their Latin; so that if they be not bettered in the knowledge of their Native Language, their labour and cost is to little or no purpose.

1662. James Howell.

*A new English Grammar prescribing as certain rules as the language will bear, for forreners to learn English * * * Also another Grammar of the Spanish or Castilian tung, with som special remarks upon the Portugues dialect * * * a discours or dialog containing a perambulation of Spain and Portugall etc. 1662. 8vo.*

For teaching reading and spelling, in addition, see Coote's English Schoolmaster (p. 690).

1570.

A Methode or comfortable beginning for all unlearned, whereby they may be taught to read English, in a very short time, with pleasure: So profitable as straunge, put in light by J[ohn] H[art] Chester Heralt. Henrie Denham. London. 1570. 4to.

Mr. W. Carew Hazlitt quotes from Lowndes:

1590. Thomas Johnson.

The Pathways to Readinge or the newest Spellinge A. B. C. (1590.)

Hoole says that he has published a *New Primer*. He says:

In the first leaf whereof I have set the Roman capitals * * * and have joined therewith the pictures or images of some things whose names begin with that letter, by which a child's memory may be helped to remember how to call his letters, as A for an ape, B for a Bear etc. This hieroglyphical device doth so affect children, (who are generally forward to communicate what they know,) that I have observed them to teach others, that could not so readily learn, to know all the letters in a few hours' space, by asking them what A stands for? and so concerning other letters backward and forward, or as they best liked.

Hoole is writing in 1660, and gives the following account of the teaching of reading:

The ordinary way to teach children to read is, after they have got some knowledge of their letters, and a smattering of some syllables and words in the hornbook, to turn them into the A B C or Primer, and therein to make them name the letters and spell the words, till by often use they can pronounce (at least) the shortest words at the first sight.

This method takes with those of prompter wits; but many of more slow capacities, not finding anything to affect and so make them heed what they learn, go on remissly from lesson to lesson, and are not much more able to read when they have indeed their book than when they begun it. Besides, the A B C being now (I may say) generally thrown aside, and the ordinary Primer not printed, and the very fundamentals of Christian religion, (which were wont to be contained in those books, and were commonly taught children at home by heart before they went to school) with sundry people (almost in all places) slighted, the matter which is taught in most books now in use is not so familiar to them, and therefore not so easy for children to learn.

Hoole accordingly included in his Primer the Lord's Prayer, the Creed, and the Ten Commandments. For practice in early reading he recommends The Single Psalter, The Psalms in Metre, and The School of Good Manners.

When children can read well, they should be encouraged to continue reading English, and not begin the Latin Accidence too early.

Instead of the Accidence, which they do neither understand nor profit by, they may be benefited in reading orthodoxal catechisms and other books that may instruct them in the duties of a Christian, such as *The Practice of Piety*, *The Practice of Quietness*, *The Whole Duty of Man*; and afterward in other delightful books, of English history, as *The History of Queen Elizabeth*, or poetry, as *Herbert's Poems*, *Quarles' Emblems*; and by this means they will gain such a habit and delight in reading as to make it their chief recreation when liberty is afforded them. And their acquaintance of good books will (by God's blessing) be a means so to sweeten their (otherwise sour) natures, that they may live comfortably towards themselves, and amiably converse with other persons.

This is the first passage in any writer that I have seen that advocates the inculcation of a pleasure and delight in reading English as a part of school work, and distinctly places Hoole at the modern point of view.

On the teaching of reading and spelling see W. C. Hazlitt's *Schools, School-Books, and School-Masters*, pages 209-219.

Mr. Hazlitt mentions the following:

1610.

A Spelling Book with Syllables, or an Alphabet and plaine pathway to the faculty of reading the English, Romane Italian, and secretarie hands,

with severall copies of the same, devised that hereby with the lesse loss of their time, they may be able to pass to the Latine tongue; also to teach the ignorant to write Orthographicie in short time. 1610. 4to.

Charles Hoole, in his *New Discovery of the Old Art of Teaching School*, in the division of the work entitled "The Petty School" says:

Amongst those that have gone a readier way to reading, I shall only mention Mr. Roe and Mr. Robinson, the latter of whom I have known to have taught little children not much above four years old to read distinctly in the Bible, in six weeks' time or under; their books are to be had in print, but every one hath not the art to use them. And Mr. Coote's English Schoolmaster seems rather to be fitted for one that is a master indeed than a scholar.

It is highly probable that the chief books to teach reading were introductions to the Bible and religious treatises, as also even the teaching of writing had the occasion improved by copies of a religious or moral nature.

In early times children were taught to read from A B C tablets. The late Mr. Tuer^a quotes from F. A. Specht's *History of Education in Germany from the Earliest Times to the Middle of the Thirteenth Century* (Stuttgart, 1885) an instance in the fifth century of the mention of A B C tablets for teaching to read. Mr. Tuer finds the first mention of real hornbooks about 1450. In 1587 the Stationers' Company licensed the Hornbook to John Wolfe, and in 1605 the company granted £3 a year to Alice Wolfe "during her life time for relinquishing her claim to the A B C hornbook." Mr. Tuer thinks the hornbook was not in general use until somewhat late in the sixteenth century. His *History of the Hornbook* is a very valuable and interesting piece of research on children's early training in reading.

As reading-books the importance of the Primer and of the Catechism must not be overlooked. Marshall's edition of the Primer appeared in 1535, Hilsey's Primer in 1539 and again in 1540, with the title:

The Primer in English moste necessary for the educacyon of chyldren extracted oute of the Mannall of prayers, or Primer in Englishe an Latex set forth by Tho laet byshop of Rochester etc. B. L.

In 1545 was published the King's Primer:

The primer, set foorth by the Kinges Maiestie and his Clergie, to be taught lerned and read: and none other to be used in throughout all his dominions. B. L.

This primer went through a large number of editions. As to catechisms it would be simply a huge task to enumerate the various editions of the catechisms issued between 1540 and 1660. Even before 1600 the number was large, as will be seen by Maunsell's list, and by 1660 the list was enormously increased.

The following are the entries under the head Catechism in Andrew Maunsell's *Catalogue* (1595):

Edmund Allen (1550), Bartimeus Andrews (1591), Jeremy Bastingius (1591), William Burton (1591), Swithin Butterfield, Theodore Beza (1578), S. S. (1583), one printed by Hugh Singleton (1579), R. Bird (1595), Tho. Cranmer (1548), Calvin's Institutions, abridged by Lawne, his Catechism (1592), Wm. Cotes (1585), John Craig Scot (1591), Fred. Count Palatine (translated, 1570), Rob. Cawdray, Tho. Cobhead, one printed for John Harrison (1582), Richard Cox, one printed by assignees of Rich. Day, C. W. (1584), translation from the French by George Capelin (1581), one in three parts (Of the Misery of Men in themselves, Of the happiness of those that believe, Of the Duties we owe to God) printed by Hugh Singleton (1582), E. C., translation by Rob. Legate, M. A. (1592), Edward Dering, Arthur Dent, Jo. Darison, An Exposition printed by Caxton, Stephen Egerton (1594), A Free Schoole for God's Children by J. R.

^a The *History of the Hornbook*, by Andrew W. Tuer, F. S. A. London. 1896.

(1593), Dudley Fenner (1592), John Fountein translated by T. W. (1578), George Gifford (1586), John Gardiner (1583), Alex. Gee, Patr. Galoway, John Gibson (1579), Wm. Hopkinson (1583), John Hooper, Wm. Horne (1590), And. Hiperius (translated by I. H. (1583), Rich. Jones, Schoolmaster of Cardiff (1589), one translated by Doroth. Martin (1581), D. W. Archdeacon (1586), Rob. Linaker, Io. Morecraft (abridgment of Ursinus, 1586), Miles Moss (1590), Tho. Michelthwait (1589); *A necessarie Doctrine and crudition for any Christian Man Set forth by the King's Majestic of England*, printed by John Mayler (1543); Alexander Nowell (translated into English by Thomas Norton), *His brief Catechism* (1587); Rob. Openshaw (1582), Gasp. Olenian (translated by Rich. Saintbarbe 1589), Wm. Perkins (1592), Palsgrave (translated by Wm. Turner, 1572), Eusebius Paget (1591), Tho. Pearston, *Preparation to the Lord's Supper* by T. W.; *Preparation to the Way of Life*, etc., vid. Hopkins; John Parker (1592), T. Robert's *Catechism in meeter* (1591), Tho. Ratliffe (1594), Christopher Shutte (1584), Tho. Settle; *Sum of Christianitie*, containing eight propositions, printed by Rob. Robinson (1585); *Summarie of Principles of Christian religion* by Swithin Butterfield (1582), Richard Saintbarbe, Short Catechism printed by Christopher Barker, one printed for Thomas Man (1590), Thomas Sharke and John Seddon (1588), Tho. Sparke Doct. Some (1583), John Tomkis *On the Lord's Prayer* (1585), Zach. Ursinus (translated by Henry Parry, 1595), Catechism abridged by John Morecraft (1586), abridged by John Seddon; Math. Virell, *Treatise containing all the principall grounds of Christian religion* (1594).

For further illustration of the importance of catechisms historically in the work of instruction, see in William London's Divinity Books, alphabetically digested, one of the sections of his catalogue (1658). Also Hugh Peters in 1660 says: "There are neer an hundred several Catechisms in the nation."

W. S., Gentleman.

1581.

A compendious or briefe Examination of Certayne ordinary Complaints, of divers of our Country men, in these our Dayes; which although they are in some part unjust and frivolous, yet are they all, by way of Dialogues, thoroughly debated and discussed. By W. S., Gentleman. Imprinted at London in Fleet streete, neere unto Sainte Dunstone's Church, by Thomas Marshe, 1581. Cum privilegio. 1581. 4to. 116 pp.

Also in the Harleian Miscellany, Vol. IX, p. 139, ed. 1812.

This book once had the honor of being attributed to William Shakespeare. In fact, it was once reprinted (in 1751) with Shakespeare's name (see Harleian Miscellany, Vol. IX, p. 139). Antony Wood, however, pointed out that the author was William Stafford, gentleman.

The dark outlook of learning.

Capper (cap-maker). In my mind it made no matter though we had no learned men at all.

Knight. God forbid, neighbour, that it should be so: how should the prince have counsellors then? how should we have Christian religion taught us? How should we know the estates of other realms, and have conference with them of all countries, except it were through learning, and by the benefit of letters?

Doctor. Care not therefore, Goodman Capper, ye shall have few enough of learned men, within a while, if this world hold on.

Capper. I mean not but I would have men to learn to write and read, yea and to learn the languages used in countries about us, that we might write our minds to them and they to us; yea, and that we might read the holy Scriptures in our mother tongue; and as for your preaching (except ye agree better) it made no matter how little we had of it, for of diversity thereof, cometh these diversities of opinions.

Doctor. Then ye care for no other sciences at all, but the knowledge of tongues, and to write and read; and so it appears well that ye be alone of that mind; for now a days when men send their sons to the universities, they suffer them no longer to tarry there, than they may have a little of the Latin tongue, and then they take them away and bestow them to be clerks with some man of

law, or some auditor and receiver, or to be a secretary with some great man or other, and so to come to a living; whereby the universities be in manner emptied, and (as I think) will be occasion that this realm within a short space will be made as empty of wise and politic men, and consequently barbarous; and at last, thrall and subject to other nations, whereof we were lords before.

The argument then deals with the necessity of experience, and the bearing of learning on experience.

The gifts we have by learning.

Doctor. Learning supplieth unto man the greatest lack that some writers have complained of to be in mankind; i. e., the brevity of age, the grossness and weight of body: where in the first, diverse beasts as harts and many other; and in the last, all birds do excell man; for where it is deemed man to live above a hundred years or thereabouts, by the benefit of learning, he hath the commodity of the life of a thousand years; yea, two or three thousand; by reason he seeth the events and occurrents of all that time, by books. And if he should have lived himself by all that space, then could he have had nothing else to his commodity but that experience of things; the rest had been but travail: which experience he hath now by letters, and without any travail in manner in that space. As to the other point, that we be not so agile and light as fowls and birds of the air be, as that we might stir from one place to another; we have the commodity through learning, that we should purchase by such peregrinations, as well as we should if we might flee from our country to another like birds, and yet with less travail and danger. May we not, through cosmography, see the situation, temperature, and qualities of every country in the world; yea, better and with less travail than if we might flee over them ourselves? for that that many other have learned through their great travails, and dangers, they have left to us to be learned with ease and pleasure. Can we not also, through the science of astronomy, know the course of the planets above; and their conjunctions and aspects, as certainly as if we were among them; yes, surely that we may, for tell me: how came all the learned men heretofore to the exact and perfect knowledge thereof: came they not to it by conference and marking of circumstances, (yes, indeed) so that out of their writings we learned it: and to the knowledge whereof by sight only we could never attain, though we were as agile as any bird.

What is there else profitable or necessary for the conjunct of man's life here in earth, but in learning it is taught more perfectly and more complete, than any man can learn only by experience all days of his life * * * as, you, sir Knight, in Vegetius; and you, good husbandman, in Columella.^a

The vast domain of studies.

Knight. I say again, might we not have that in our English tongue, and read them over, though we never went to school?

Doctor. Yea, well enough; and yet should ye be far from the perfect understanding of them, except ye had the help of other sciences; that is to say, of arithmetic, in disposing and ordering your men; and geometry, in devising of engines to win towns and fortresses, and of bridges to pass over; in the which Caesar excelled other, by reason of the learning that he had in those sciences and did wonderful feats which an unlearned man could never have done; and if ye had war over the sea, how could ye know towards what coasts ye be sea driven, without knowledge of the latitude of the place by the pole, and the length by other stars;

Astronomy.

and you, good husbandman, for the perfection of the knowledge of husbandry, had need of some knowledge in astronomy, as under what aspect of the planets and in the entry of what sign, by the sun and the moon it is time to ear, to dung, to sow, to reap, to set, to graff, to cut your wood, your timber; yea, to have some judgment of the weather that is like to come for inning of your corn, and grass, and housing of your cattle: yea of some part of

Physic

called Veterinaria, whereby ye might know the diseases of your beasts, and heal them.

^a Similarly Milton, in his Tractate, refers to Columella as one of the text-books for agricultural knowledge.

Geometry

Then for true measuring of land, had ye not need of some knowledge in geometry to be a perfect husband?

Architecture.

Then for building, what carpenter; or mason, is so cunning or expert, but he might learn more by reading of Vitruvius and other writers of architecture; that is to say, the science of building; ^a

Philosophy, especially moral philosophy.

And to pass over the sciences of logic and rhetoric, whereof the first travaileth about the discussion of the true reason from the false, the other about the persuasion of that is to be set forth to the people, as a thing to them profitable and expedient, whereof a good and perfect counsellor might want neither: well, tell me what counsel can be perfect, what commonweal can be well ordered upright, where none of the rulers, or counsellors, have studied any philosophy? * * * If men expert in this science were consulted and followed, the commonweal should be ordered as few should have cause to complain; therefore, said Plato, that divine philosopher, that happy is that commonweal where either the prince is a philosopher, or where a philosopher is the prince.

The Knight then says:

I had weened before, that there had been no other learning in the world but that these men had, that be doctors in divinity, or of the law, or of physick. * * *

The dangers and weakness of specializing too soon.

The Doctor. [People] fall to those sciences that they see in some price; as to divinity, to the law, and to physick: though they cannot be perfect in any of these without the knowledge of the sciences above touched; and therefore it is ordained by universities, that first men should be bachelors and masters of arts, ere they should come to divinity: and these arts be the seven liberal sciences, as grammar, logic, rhetoric, arithmetic, geometry, music and astronomy; and now they skip over them and fall to divinity by and by, before they have gotten or purchased them any judgment through the aforesaid sciences, which maketh them to fall to these diversities of opinions that ye speak of: for all beginners in every science be very quick and over-hasty in giving their judgment of things, (as experience teacheth every man) and then when they have once uttered their judgments and opinions, they will see nothing that will sound contrary to the same, but either they will construe it to their own phantasy, or utterly deny it to be of any authority. * * *

A commendation of learning.

I speak thus much of the commendation of learning; [in general subjects] not only because I heard my friend here [the Capper] set little by learning, but also that I see many now-a-days of his opinion, which care nothing for any other knowledge, but only that they may write and read, and learn the tongues: whom I can resemble well to those men that esteemeth more the bark than the tree, the shale more than the kernel: wherefore they seem to take bright sun from the earth, that would take away learning from us: for the sun is no more necessary for the increase of all things on earth, than is learning for the increase of civility, wisdom and policy among men. * * *

Causes of the decay of learning.

The Doctor. I shewed you, already, one great cause * * *, that was, where I shewed you that most men were of that opinion, that they thought learning enough to write and read: another cause is, that they see no preferment ordered for learned men, nor yet any honour or estimation given them like as hath been in time past. But rather the contrary, the more learned, the more troubles, losses, and vexations they come unto.

ABRAHAM FLEMING.

1581.

The Footpath to Felicitie, Which everie Christian must walke in, before he can come to the land of Canaan. By Abraham Fleming. At London, Printed by Henrie Denham etc. 1581. (12mo.)

* The above may be regarded as essentially an early plea for technical education.

In this volume is contained:

The Schoole of Skill, Or The Rule of a reformed life: Digested into three sententious sequences of the A, B, C. Wherein the weake have their full measure of pure milke, and the strong their just weighte of sound meate. By Abraham Fleming, Matt. 7, 12. Printed at London by Henric Denham, dwelling in Paternoster rowe, at the signe of the Starre. 1581.

The passages quoted are from the preface. The School of Skill consists of 20 pages, arranged in "sententious sequences of the A, B, C;" i. e., verses taken from or adapted from the Scriptures, each verse beginning with a fresh letter of the alphabet, the alphabet being run through three times. (J, U, and X are omitted.)

Child training and house building.

It is the custom of parents, disposed to train up their children in learning and knowledge of tongues, arts, and sciences: first in their infancy to commit them to some honest schoolmaster, under whom they might be taught the principles of their own natural tongue, and afterwards in tract of time, as their capacity increased, the rudiments of foreign speeches. For he that determineth to erect and build a dwelling-house, beginneth not at the roof, but at the foundation, otherwise, as it were a preposterous kind of attempt, so all the world would judge it fond and ridiculous.

The valiant captain made a passing soldier by training.

Again, we see, and experience teacheth no less, that the expertest and valiantest Captain that ever fought in field, was not a perfect warrior born, though peradventure there was in him some vehement inclination to martial policy and prowess, but first he had his slender beginnings, and simple trainings up, fit and convenient for the nature of his age, which trainings up in military knowledge and warlike activity continued, the learner becometh more skilful and courageous, and at last, by frequenting the field, and enuring himself to trials of valiantness, proveth a passing soldier.

The school of skill.

These principles or rules leading us to the knowledge and practice of a godly and upright life, I have thought good to call *The School of Skill* * * *. To esteem of them, as of acceptable treasures, and to order the course of life, according to their prescription and platform is an evident sign or token of good skill.

W. AVERELL.

1584.

A Dyall for dainty Darlings, roekt in the Cradle of Securitie. A Glasse for all disobedient Sonnes to looke in A Myrrour for vertuous Maydes. A Booke right excellent, garnished with many worthy examples, and learned auctorities, most needful for this tyme present. Compiled by W. Averell, Student in Divinitie, and Schoolemaister in London. Imprinted at London for Thomas Hackette, and are to be solde at his shoppe in Lumbert Streete, under the Popes head 1584. 4to.

Cockering fathers reproved.

Draw near, you dallying Dads, that mar the minds of your children, by excessive and overmuch cockering; behold the judgments of God, that punisheth you in those things that you chiefly love, because you make them your gods, who ought to be their guides, you adore them like saints, which should serve you like sons, you let them run at liberty which you ought to keep in straightly, you minister to their needless youth, which should labour for your needful age, you give them all things and deny them nothing, and yet you complain that your children are graceless, when you yourselves are not therein blameless.

ADRIANUS JUNIUS.

1585.

*The Nomenclator, or Remembrancer of Adrianus Junius, Physician, divided in two Tomes, containing proper names and apt termes for all thinges under their convenient Titles, which within a few leaves doe follow: Written by the said Ad. Ju. in Latine, Greeke, French and other foreign tongues: and now in English by John Higgins: With a full supplie of all such words as the last enlarged edition affoorded; and a dietional Index, containing above fourteene hundred principall words with their numbers directly leading to their interpretations: Of special use for all scholars and learners of the same languages * * *. Imprinted at London for Ralph Newberie and Henrie Denham. 1585. Svo.*

Adrian Junius was born in 1511 or 1512 at Hoorn, in Holland. He studied at Haarlem and Louvain. He also studied physic in Paris and Bologna, where he took his doctor's degree. Became physician to the Duke of Norfolk in England in 1543. Lived in England some years. Compiled a Greek and Latin lexicon, to which he added above 6,500 words. By dedicating this work in 1548 to Edward VI he fell under the displeasure of Rome, and his works were placed in the Index Expurgatorius. He left England, but returned on the accession of Mary, and in 1554, on her marriage to Philip, wrote an epitaphium. Returned later to Haarlem, where he lived until 1573. In the siege of that year he lost his library and the MSS. of a great number of works. Died 1575.

One of his well-known works is:

Adagiorum ab Erasmo Omissorum, Centuria octo et dimidia. 1558.

His other works are principally commentaries on classical authors.

The first edition of the Nomenclator was published Ludg. Bat. 1567.

The idea of the Nomenclator is clearly that of an encyclopedic vocabulary. Its difference, therefore, from Bathe's "Janua Linguarum" is that the words are not arranged into sentences, and, further, its number of words is much more comprehensive. It was a book of wide circulation and influence, and though not mentioned by Mr. R. H. Quick and Doctor Laurie there can be no doubt that it or others of its kind had a considerable direct influence on Comenius. It is the outcome of amazing erudition and research, the enormous labor involved putting the ingenious and painstaking Janua (of Bathe) itself into the shade. The writings of 62 Latin and Greek poets, 58 doctors, philosophers, and rustic writers, 62 historians and orators, 20 theologians, 13 jurists, and 52 grammarians, together with 44 others of the later Latin and Greek authors, have been ransacked to supply material for the names of *things* mentioned in this extraordinary book. In fact, the Nomenclator professes to supply the proper names and apt terms for *all things*, under their convenient titles in Latin, Greek, French, and English. It out-Comeniuses Comenius in its encyclopedic detail. There are 89 different subjects for chapters. In Comenius's Janua there are 100, so that Comenius gets a better arrangement. There are many subjects in common, such as living creatures, animals, fishes, all kinds of food, trees, vegetables, apparel, buildings, parts of ships, tools, terms in war, games, money, the elements, God and spirits, handicrafts, trades, affinities, etc. Nothing which suggests itself to the mind of the compiler of this book presents any insuperable difficulty in making a Latin name or description of it, whether the thing were of recent invention or, as one would suppose, so little important as never to have been named in Latin authors. The Latin name for *all things* is always forthcoming.

Living Creatures, as we have mentioned before, ought to be painted, and none but those at the first which are known to children that begin to learn the

Latin tongue. Moreover, all those terms or words, whose things thereby signified can be seen and painted, may be taken out of the Nomenclator of that most excellent man, Hadrianus Junius, or others; provided that the exordium or beginning be made from those which are more known. (Ellhardus Lubinus, in Samuel Hartlib's translation in the True and Ready Way to Learn the Latin Tongue.)

ANGEL DAY.

1586.

*The English Secretarie, Or Methode of writing of Epistles and Letters: With A declaration of such Tropes, Figures, and Schemes, as either usually or for ornament sake are therein required. Also the parts and office of a Secretarie. Divided into two bookes * * * By Angel Day. 1607. First ed., 1586. Other editions, 1587, and five other editions are named up to 1614 (Dict. of Nat. Biog.).*

This treatise discusses the nature of epistles, their commodities and use, what is chiefly to be respected in framing of an epistle; of the habits and parts of epistles, of the contents as common to all, of the divers orders of greetings, farewells, and subscriptions, of superscriptions and directions, and the divisions of letters. Then are given models of the different kinds of letters: Descriptive, laudatory and vituperatory, deliberative, responsory, hortatory, suasive, dehortatory, dissuasive, conciliatory, reconciliatory, petitory, commendatory, consolatory, monitory and reprehensory, amatory, judicial, excusatory, purgatory, defensory, expostulatory, exprobratory (e. g., touching ingratitude received), invective, comminatory, deprecatory familiar (nunciatory and narrative), remuneratory, locutory, gratulatory, objuratory, mandatory; of figures, tropes, and schemes.

The final section is of the parts, place, and office of a secretary. The special abilities and qualities which make a man a good secretary or confidential amanuensis (for this is what Day seems to have in mind) are there laid down, and the consideration of these abilities and qualities seems to suggest an educational ideal quite as distinctly as the educational treatise directly so called.

The secretary's education.

After remarking on the necessity of dealing with deep and weighty affairs, Day insists that the secretary must have skill and knowledge accordingly.

To this end it becometh that he be well studied, especially in the Latin tongue. It is likewise convenient that herewithal he have a ripe and quick conceit, aptly to receive, what on a sudden shall be to him delivered, and that he retain with himself a sound and good memory, for the conservation of those things that unto his charge shall daily be committed. He ought for his own furniture and instruction to be a man not altogether unexperienced, to be well-languaged, to be sufficiently read in Histories^a and antiquities and times passed, to have

^a The following books on history reading are worthy of mention:

Thomas Blundeville.

The true order and Methode of wryting and reading Hystories, according to the Prcepts of Francisco Patritio and Acontio Tridentino, no less plainly than briefly set forth in our vulgar speech, to the great profite and commoditie of all those that delight in Hystories. London. 1570. Svo.

The true Method of Writing and Reading Histories, according to F. Patricio and Acontio Tridentino (i. e. Francesco Patrizi and Jacobus Acontius). Translated by Thomas Blundeville. Lond. 1674. Svo.

Degory Wheare, the first Camden reader of history in Oxford, published his *De Ratione et Methodo Legendi Historias* in 1623. The work is best known in its English translation by Edmund Bohun, 1694. Mr. W. P. Courtney in the *Dict. Nat. Biog.* (Vol. LX, p. 432) says that Wheare's book was used as a text-book at Cambridge until the beginning of the eighteenth century. My copy, dated 1698, has the title: *The Method and Order of Reading both Civil and Ecclesiastical Histories, in which The most Excellent are Reduced*

notice, both by reading and conference, of the situations, customs, manners and conditions of men, cities, countries and commonweals, to have familiarity with strangers, and men of divers nations, whereby the better to be ascertained of their humours, behaviours, and dispositions; and wisely to work unto himself a peculiar insight into their estates, counsels and jurisdictions, being therewithal wary, that this association with such kind of people work not unto himself, or the affairs wherewith he shall be credited any matter of prejudice.

Richard Brathwait (?1588-1673) wrote *Some Rules and Orders for the Government of the House of an Earle*. Of this there was a reprint in 1821. In it there is a section on: The Secretary, his Place. Brathwait says:

He should be a man brought up in the universities, having studied both Logic and Rhetoric; he is to understand the Latin and Greek Tongues; also the Italian, French, and Spanish, with other Languages, but also to speak and write well in them, thereby he shall be the better able to discourse with other Noblemen's men and Strangers.

Learning of itself is not sufficient to make the ready man as a secretary. Even a man with a sound knowledge of Latin and Greek and with a laudable knowledge of foreign languages may not do well. And again, those of "less skill and greater ignorance of learned knowledge" may have a "conceit to rise," and may have a "wit so prompt and capable of anything laid before them, as by and by there wanteth not (though in truth when they have done, they can not learnedly answer for it) neither invention nor imitation wherewith in very commendable sort to perform what them seemeth good on a sudden to deliver in writing." Day's conclusion is that to be a good secretary a man ought to be "more than ordinarily learned, with the greatest ability and perfection and also every way adorned." He requires birth, education, quality, disposition, conversation, and ability, "to be meet for that purpose." This recognition of general power and capacity is precisely the educational ideal which is missed so often in the distinctively educational treatises. When such a developed power is forthcoming and directed into a special channel we get the modern idea of technical education. And Day may be represented as offering views on technical training, viz, the training of a secretary. Such a presentation is not without its interest if we call to mind John Milton as the Latin secretary of the Commonwealth. No doubt, had Day lived after Milton he would warmly have claimed him as an example of the educated man who had fitted himself for the secretary's post, though Day speaks of secretaries to individuals—emperors, lords, and gentlemen.

The following are examples of books of letters of the period. There are probably many others of the same kind:

Fleming, A.

A Panoplie of Epistles; or a Looking Glasse for the Unlearned; conteynning a Perfecte Platforme of Inditing letters of all Sorts, to Persons of all Estates and Degrees; as well our Superiors, as also our Equals and Inferiors; used of the last and eloquentest Rhetoricions that have lived in all ages, and have been famous in that Facultie. Gathered and translated out of Latin into English by A. Fleming. B. L. 1576. 4to.

into the Order in which they are Successively to be Read; and the Judgments of Learned Men, concerning each of them, Subjoin'd. There is an appendix by Nicholas Horseman "concerning the Historians of Particular Nations, as well Ancient as Modern." And further, is added: "Mr. Dodwell's Invitation to Gentlemen to acquaint themselves with Ancient History."

Matthias Prideaux.

An easie and compendious introduction for reading all sorts of Histories, contrived in a more facile way than heretofore hath been published; to which is added a Synopsis of counsel.

This was published in 1648, two years after Prideaux's death. It has been suggested that the book was edited by his father, John Prideaux, Bishop of Worcester. (Dict. Nat. Biog., Vol. XLVI, p. 354.)

Fulwood, William.

*The Enemie of Idlenesse: Teaching a perfect platforme how to indite Epistles and Letters of all sortes * * * The whole divided into foure books: now newly published and augmented, by W. F. H. Middleton, London, 1586. Svo. Also 1621.*

W. I.

*A Speedie Poste, with certaine new letters * * * for the helpe of such as are desirous to learne to write letters, etc. (1629.) 4to.*

Serre, Puget Sieur de la.

Le Secrétaire de la Cour; ou la Manière d'écrire selon de temps. Translated into English with a collection of Choicé Epistles by J. M. Lond. 1654. Svo. The same, with additions, 1658, Svo. Originally appeared at Paris, 1624, Svo.

The Achademy of Complements, wherein Ladies, Gentlewomen, Scholars and Strangers, may accomodate their courtly practice with gentle Ceremonies; complacental, amorous high expressions, and forms of speaking and writing of Letters most in fashion, with excellent similitudes, comparisons, fancies, and devices; with a Table resolving the most delightfull fictions of Heathen Poets. (Published before 1650.) Wm. London's Catalogue.

Such a book may be compared with Wit's Commonwealth; see p. 693.

WM. KEMP, or KEMPE. *fl.*1590.

Studied at Trinity Hall, Cambridge; graduated B. A. 1580, M. A. 1584. In 1581, master of the grammar school at Plymouth, where he stayed till 1604-5. Wrote, in 1587, "A Dutiful Invective against the most Heynous Treasons of Ballard and Babington: with other their Adherents latelie executed. Together with the Horrible Attempts and Actions of the Q. of Scottes; and the Sentence pronounced against her at Fodderingay, Newlie compiled and set fourth in English verse. For a New Yeares gifte to all loyall English Subjects, by W. Kempe." 4to. The date of his death is unknown.

1588.

The Education of children in learning: Declared by the Dignitie, Utilitie, and Method thereof. Meet to be knowne, and practised as well of Parents as Schoolmaisters.

Teach a childe in the trade of his way, and when he is old he shall not depart from it. Prov. 22, 6.

Fathers provoke not your children to wrath, but bring them up in learning and information of the Lord. Ephes. 6, 4.

The rod and correction give wisdom, but a child set at libertie maketh his mother ashamed. Prov. 29, 15.

Foolishness is tied in the heart of a child, but the rod of discipline shall drive it away. Prov. 22, 15.

Imprinted at London by Thomas Orwin, for John Porter and Thomas Gubbin, 1588. 4to. 52 pages of text.

I have sent you, dear friend, a little pamphlet, of the education of Children in learning, which is no fantastical nor idle toy, but a very profitable matter, and most necessary to be urged in this secure and licentious generation * * *. Where as the charge of teaching appertaineth not onely to a few of the learned sort, namely, to schoolmaisters, we to make the argument more popular, have prefixed a necessary exhortation for all other sort of people, setting forth the dignity and utility of the matter with such holy and ancient histories, with such plain and sensible reasons, as may teach the unlearned with some delight, and not be tedious to those that are learned. Again, to satisfy in some part the expectation of the learned, we have handled the method more mechanically, and adorned the whole work with some witty Greek and Latin sentences, englishing the same nevertheless in margin for the behoof of the unlearned. And as generally both sorts may peradventure think that the reading of it will be worth the labour, so almost every one of each sort in particular, may find somewhat for his purpose. For who is it of what state or degree soever, upon whom God hath not cast the care and charge, either of teaching, or of learning, or else of causing others to be taught and learned?

The dignity of schooling.

Schools are to be traced through three stages—the schools of the Hebrews, of the Gentiles or the school of humanity, and the school of Christianity.

Adam “no doubt did his duty in teaching his children.” “Seth was a very godly and learned schoolmaster.” Noah was a “doctor of righteousness and godly knowledge.” These, however, did not write down their learning, but Moses, “the next renowned doctor in this school, cometh forth with his pen and ink and writeth the laws and precepts of the living God.” Joshua was an “active captain and teacher of his people and made unto them many pithy orations, and divided to every man the portion of his inheritance; which thing also required knowledge in the Mathematical Arts.” The common school was “first instituted in Naloth (I Sam. 19, 18; 19, 20), whereof Samuel the Lord’s Judge and Prophet was moderator and Maister. Such an honorable man was the first public Schoolmaister in this school, whose scholars then, as the scholars a long time after him were called the sons of the prophets, because the benefit of their good instruction, which they received of the Prophet, their Master, was esteemed at no less price than the benefit of their begetting and birth which they had of their parents.” “Concerning Eliseus there is mention made of an hundred Scholars that were under him in Gilgal and of the poor diet wherewith they were sustained.” John the Baptist “was a visitor and reformer of the Colleges and also the last doctor in this School of the Hebrews.”

So much for Kemp’s method of illustrating the dignity of schooling. It will readily be credited that, on the same plan, he finds the treatment of the Gentiles—i. e., the Greeks and Romans—easy work. Kemp concludes this section with the following energetic passage:

Now then we have very hastily in respect of so copious a matter, travailed through these three Schools of the Hebrews, of the Gentiles and of the Christians, wherein tracing the dignity of learning and schooling, whether ye consider the setters forth and supporters thereof, or the teachers, or else the scholars, we have noted out unto you of all three sorts, besides God the principal Author, Kings, Princes, wise Counsellors, men of great estimation, virtue and godliness, generally in all these schools, and particularly also we have observed how every one doth excel in his particular praise, namely, the School of the Hebrews hath the chief praise of most ancient and true godliness: the School of the Gentiles, of framing an artificial way and method to attain learning by: the School of the Christians, of manifesting the true practice of all learning, referring it to the right end.

Now if by any means all these so honourable and godly personages should rise out of their graves and with their majestical presence appear unto us that live in this age, and in this country, and with their sage and eloquent tongues declare unto us, some, what pains and charges they have employed: some, what diligence and study, they have used in planting and watering, in nourishing and cherishing of knowledge and learning, I suppose that many parents would hang down their heads for shame of their negligence, and many children and youth would lament their miserable estate and condition for want of good education.

The utility of schooling.

It brings eternal salvation, doubles the quickness of the sight (by adding the sight of the mind), and lays for the commonwealth the foundations of prosperity and safety (as to which see Plato). Kemp takes the opportunity to say:

O therefore that this town [Plymouth] might now bring forth some young imps’ and buds of learning whose fruit would be sweeter than all banquetting dishes to feed the Commonwealth and Church of God, both here and in other places. For what great good would it do, not only to yourselves but to this Western part of our country, but also to strangers of other nations, which resort hither for earthly gain, when by this means they shall carry away heavenly treasures: When they shall find, even in merchants’ shops, learning more plentiful than wares, sufficient to refute their errors and to instruct them in the truth and way to salvation? * * * In what estimation therefore ye hold the glory

of God, what account ye make of the salvation of your souls, of the felicity of your country, at that price must ye esteem the planting of learning, and so great care must you have of the good education of your children.

The method of schooling: Duties of parents.

Parents, first, must enter children in honest actions and civil language, which care must not be omitted any time afterwards. At 5 years of age he must be handed over to some Phœnix "that can teach him all things, framing him to eloquence in talk, and virtue in deeds." Great care is to be taken in choice of the teacher, and indeed previously as to his nurses, and always as to his play-fellows. Public-school teachers are to be preferred to the private teacher.

The parent must not "neglect the ordering of his child because he hath put him in the hands of a master." Jointly with the master the parent should prescribe "a good order for manners and behaviour, for repairing home, for attendance, for diet, for apparel, for exercise in learning, etc."

Duties of the schoolmaster.

Shortly, these are, to use the best way and order both in teaching and also in governing.

All knowledge is taught by precepts of art and also by practice of the same precepts. The scholar, therefore, firstly, learns the precepts; secondly, notes the examples of the precepts in unfolding other men's works; thirdly, imitates the example in some work of his own; fourthly and lastly, makes somewhat alone without an example. This holds for grammar, logic, rhetoric, arithmetic, geometry, and any other art.

First degree of schooling.

Prosodia and orthographia are learned first—are the first degree of teaching. The artificial precepts in this faculty are the four and twenty letters and the table of the syllables. Next, these are practised by reading the catechism and primer. Each word should be learned and spelled perfectly. "One word exactly learned will bring more fruit than twenty words rawly passed over." For the better confirming of the memory of words let him learn to write when he is through the catechism. In this exercise of writing the scholar shall spend but two or three hours in a day at the most, employing the rest of the time in reading until he be about 7 years old.

Method of teaching writing.

The master shall teach his scholar to write by "precepts of holding the pen, of forming the letters in due proportion, of joining them aptly together; by practice, of drawing the pen upon the figures of shadowed letters, then of writing without shadowed letters by imitating a copy, lastly, of writing without a copy."

Second degree of schooling. Grammar and languages. First form. (Each form may occupy a year.)

Beginning of grammar in the Latin tongue. Latin reading. Learn by heart the parts of speech and their properties, as the derivation and composition of words; the forming of numbers, cases, and genders in every declension of nouns; the forming of diminutives in substantives, of comparisons in adjectives: so the forming of numbers, persons, tenses, and moods in every conjugation of all sorts of verbs. Learn the concordances of speech with examples.

Second form (entered at 8 years of age).

Practise precepts of grammar, in expounding and unfolding the works of Latin authors.

The Dialogues of Corderius and Castalion. ("Now, because children learn first to talk familiarly with their fellows or others, dialogues are most easy for their capacity.")

Method of teaching.

The Master shall first read sensibly a competent lecture, then declare the argument and scope of the author, afterwards English it either word for word, or phrase for phrase, as the property of both languages will permit. Last of all teach or cause another to teach the divers sorts of the words, their properties and syntaxes of speech. After three or four hours, the scholar should be examined. The examples in the lecture are to be referred to rules of art. Then follow sentences by imitation; afterwards, sentences without imitation.

Third form (at age of 9 years).

Harder Dialogues. Tully's Epistles, edited by Sturmius. Note the principal phrases in a notebook. Then imitation with variety. Thus, after translating a letter from Cicero, write a letter from a father to his son.

Practise compositions without imitation, both speaking and writing, in Latin; e. g., lessons, orders in the school, dinner and supper, etc.

Double translation.

Fourth form (10 years of age).

The same, with augmentations of length and hardness.

Fifth form (11 years of age).

Terence's Comedies; Tully's Treatises, Of Friendship and Of Old Age; Ovid de Tristibus. If the scholar be a Grecian, in this form he begins Greek grammar, to which he gives up the fourth part of his time. (So, too, if he would be a "Hebrician.") This is the end of the fifth form work and the twelfth year of the scholar.

Third degree of schooling. Logic and rhetoric. Three years' study.

Precepts concerning the divers sorts of arguments in logic. Tropes and figures in the first part of rhetoric. To this study one-sixth of his time is to be given, all the rest of the time to be given in learning and handling good authors; e. g., Tully's Offices, his Orations, Caesar's Commentaries, Virgil's Æneid, Ovid's Metamorphoses, Horace. Examples of hardest points in grammar, arguments in logic, tropes and figures in rhetoric. Axioms, syllogisms, and methods of authors to be noted. Also the rhetorical pronunciation and gesture fit for every word, sentence, and affection. Imitation to correspond—sometimes in prose, sometimes in verse. Composition without imitation.

Fourth degree of schooling. Arithmetic and geometry.

The scholar can easily pass through these arts in half a year, and so before "the full age of sixteen years be made fit to wade without a schoolmaster through deeper mysteries of learning, to set forth the glory of God, and to benefit his country."

The master's duty of governing.

Consists in prescribing a good order both for manners and learning and in causing the same to be kept.

Rewards and punishments necessary:

Rewards: Praise is a bait to draw to learning. Also the master may give "trifles and gay things to such as show any token of forwardness, diligence, and wittiness, or are victors in virtue." According to Horace's saying, "Pueris dant crustula blandi doctores, elementa velint ut discere prima." Holidays approved for good work.

Punishments: Admonition, rebuking, punishment with the rod, or restraining of recreation, or the service of drudgery; e. g., the sweeping of the school. Worst of all, "cutting off from the school."

1592.

The Art of Arithmetick in Whole Numbers and Fractions. In a more readie and easie method than hitherto hath been published. Written in

Latin by P. Ramus: and translated into English by William Kempe. Imprinted at London by Richard Field for Robert Dextar dwelling in Paules Church-yard at the signe of the Brasen serpent. 1592. 8°.

Kempe dedicates his translation to the Right Worshipful Sir Francis Drake.

In this dedication Kempe asks who is there that can attain to a knowledge of his art, whatever it is, without arithmetic. It is useful in divinity, in civil polity, and "in the seat of judgment the golden rule of proportion is the law of equity." In physics, in astronomy it is clearly necessary.

What is music [he goes on], in sounds, in harmony and in their spaces, concords, and diverse sorts, but only arithmetic in hearing? Take away arithmetic, ye take away the merchant's eye, whereby he seeth his direction in buying and selling; ye take away the goldsmith's discretion, whereby he mixeth his metals in due quantities; ye take away the captain's dexteritie, whereby he embattaileth his army in convenient order; finally ye take from all sorts of men, the faculty of executing their functions aright. Arithmetic then teacheth unto us matters in divinity, judgeth civil causes uprightly, cureth diseases, searcheth out the nature of things created, singeth sweetly, buyeth, selleth, maketh accounts, weigheth metals and worketh them, skirmisheth with the enemy, goeth on warfare, and setteth her hand almost to every good work, so profitable is she to mankind.

Mulcaster, it will be remembered, says scarcely anything as to the teaching of mathematics. See page 654.

LOUIS LEROY (ROBERT ASHLEY, TRANSLATOR).

1594.

Of the Interchangeable Course, or Variety of Things in the Whole World; and the Concurrence of Armes and Learning, thorough the first and famoussest Nations: from the beginning of Civility and Memory of man, to this Present. Moreover, whether it be true or no, that there can be nothing said, which hath not been said heretofore: and that we ought by our own Inventions to augment the doctrine of the Auncients; not contenting ourselves with Translations, Expositions, Corrections and Abridgments of their writings.

*Written in French by Loys le Roy called Regius: and translated into English by R. A. * * * At London Printed by Charles Yetseweit Esq at his house in Fleetstreet near the Middle Temple gate. 1594. fol.*

R. A.—Robert Ashley (1565–1641). Born at Damerham, 7 miles from Salisbury. At school under Hadrian Saravia at Southampton. Connected with several colleges at Oxford, but took no degree. "Finding the practice of law to have ebbs and tides, he applied himself to the learning of the languages of our neighbours, to the end that he might be partaker of the wisdom of those nations, having been many years of this opinion, that as no one soil or territory yieldeth all fruits alike, so no one climate or region affordeth all kind of knowledge in full measure." Buried in the Temple Church, London.

This book, consisting of 261 small folio pages, is an elaborate history of knowledge and learning from the point of view of the sixteenth century. The translator in his dedication says:

This work is a comparison of this later age, with all antiquity in Arms, in Learning and all other Excellency. There was never any mighty Empire or Monarchy, Kingdom or Common-wealth but is here represented; no famous Founder or Governor of State, no learned Law-maker, or worthy Warrior, but is here mentioned; and each of them to the other in all conveniences and contrarieties compared: which being done by a man of great learning and judgment, to men of much business and employment * * * who have no time to fetch everything from the Fountain, search all Antiquity, and read the Histories of all nations must needs be much available; and the pleasure thereof to all sorts of men accordingly auswerable.

The author thus summarizes the idea of his work:

In the whole work therefore are represented, the successive or rather alternative changes of the whole world, as well in the higher or superior, as lower and inferior part thereof; and how by the concurrence of Arms and Letters, thorough the most renowned Nations of the World, all liberal Sciences and Mechanical Arts, have flourished together, fallen and been restored, divers times in process of Age: With a comparison of such Nations as have excelled, both in power and in knowledge; of the great Empires, and renowned Monarchs, under whom these notable mutations of mankind have happened; and conferring of this our present, with the famousest former Ages, to know wherein it is either inferior, superior, or equal to any of them.

The work is divided into 12 books. Book xi deals with:

The comparison of the present with former ages.

This age is compared unto the former ages most famous in deeds of arms, conduct of states, excellency of learning, perfection of workmanship, novelty of inventions, navigations never attempted heretofore, and discovering of new lands, unknown to Antiquity: to know wherein we are inferior or equal to the ancients, and wherein we ought to be preferred. First of all is conferred our modern Warfare, with the ancient Greek and Roman; Tamberlan is compared with Nihus, Sesostris, Cyrus, Darius, Alexander, Arsaces, Hannibal, Julius Cæsar, Constantine, Attila, and Charles the Gt. Then followeth the comparison of our modern kingdoms, empires, monarchies, and commonweals, with the ancient. Of military nations, armies, battles by sea and by land, sieges and assaults of fortresses. Of navigations and discoveries of countries, perigrinations and voyages by land. Of the wealth of the present time, with that of the time past. Of the manners of this Age, with the former. Finally, of the learning of this Age with the ancients; in philosophy, eloquence, law, policy, physick, poesy, astrology, cosmography, and the other mathematics. Then cometh the conclusion of the work, by which there is a vicissitude resolved on in all matters: And how it is to be feared, that Power, Wisdom, Learning, Sciences, Books, Industry, Workmanships and the Knowledge of the World being now come to so great excellency, should fall again: as they have done in times past.

Book xii: The possibility of increase even further of knowledge.

Considering then, that the variable disposition of human things is to be ready to fall, when they are at their highest; and that virtue and vice are come to their top and perfection; doubting least among so many partialities and heresies (whereof the world is full) and the wars which threaten us on every side, that Learning might come to be despised; and be as loosely left off, and neglected, as heretofore it hath been diligently followed and regarded: To the end to prevent such a mischief and to advise the studious to remedy it, as much as they may, I have added an Inquisition on the common speech of men, by which they have always maintained, and do yet maintain, That nothing can now be said, which hath not been said heretofore. Wherein I endeavour to show, that there remaineth yet much to be said; and that the truth hath not been thoroughly discovered, neither all knowledge forestalled by our forerunners: Admonishing the Learned, to add that by their own inventions, which is wanting in the Sciences; doing that for posterity which antiquity hath done for us; to the end, that Learning be not lost, but from day to day, may receive some increase.

Speaking of the comparison of his age with antiquity in regard to learning, Leroy says:

The greatest part of Teachers use but rehearsings and repetitions by rote, acquitting themselves lightly of their charges. They which write for the most part, do nothing but tie together, and all heap one on another Grammars, Rhetorics, Logics, Institutions, Introductions, Abridgements, Annotations, Corrections, Translations, Epistles, Orations, Eclogues, Dialogues, Common Places, Elegies, Odes, Vulgar rimes and such other versifications. Moreover we must learn out of books, in the schools, the Latin, Greek, Hebrew, Chaldaic, and Arabian; which were mother tongues amongst the ancients and they learned them from their cradle, when they began to speak: In which we must now consume much time, and the best of our age; which were better employed in the knowledge of things, and understanding of the sciences. [Note that this is written before the time of Comenius.] Besides there is one inconvenience in learning, which is not small; that they are all their life time brought up in the

shadow of schools, without knowing of their behaviour amongst men; and without having experience of matters; although knowledge without practice be unperfect * * *. In the Mathematics [we have not at this day such eminent persons as] Euclid, Eudoxus, Archimedes and Ptolomeus: albeit there have been in them very excellent men of this age. For sithence they were extinguished in Egypt, and left off by the Greeks, and Arabians; they were never more famous than they are at this present: especially Astrology and Cosmography; for the ancients scarcely understood the one half of heaven, of the earth, and of the sea, knowing nothing in the west beyond the Canaries; and in the east beyond Catygare. At this day all lands and seas [sic] are known and sailed * * * Cosmography and Astrology are so beautified, that if Ptolemy, the father of them both, were alive again, he would scarce know them, being increased in such sort by the late observations and navigations. Regiomontanus is reputed the best mathematician of this age, and thought to be little inferior to Anaximander the Milesian; or Archimedes the Syracusan. His master Purbachius, the Cardinal of Cusa, and Copernicus (being Germans all of them) have excelled in these sciences. Also Jovianus Pontanus hath taken great pains in Astrology being no less happy in prose than in verse; and apt for any kind of writing.

JOHN HUARTE (RICHARD CAREW, TRANSLATOR—1555-1620).

1594.

Examen de Ingenios. The Examination of men's Wits. In which, by discovering the variety of natures, is shewed for what profession each one is apt, and how far he shall profit therein. By John Huarte. Translated out of the Spanish tongue by M. Camillo Camilli. Engliſhed out of his Italian by R. C. Esquire. London, Printed by Adam Istip, for Richard Watkins, 1594. 4to.

Dedicated to Sir Francis Godolphin:

Good Sir, your book returneth unto you clad in a Cornish gabardine, which if it become him not well, the fault is not in the stuff, but in the botching tailor, who never bound Prentice to the occupation and working only for his pastime, could hardly observe the precise rules of measure.

Huarte's own dedication is to King Phillip of Spain, and he has also a Proem to the Reader of 8 pages. The text occupies 333 pages. Huarte's book was published in Spain, at Pamplona, not later than 1578, and was translated into Italian, and published at Venice, in 1582.

The general position of the author is that "Nature is that which makes a man of ability learn," and that if a child have not the disposition and ability which is requisite for that science whereunto he will addict himself, it is a superfluous labor to be instructed therein by good schoolmasters, to have store of books and to continually study it.

Earliest edition in British Museum catalogue:

*Huarte Navarro (Juan de Dios). Examen de ingenios * * * Pamplona. 1578. Svo.*

Later London editions of Carew's translation, 1596, 1604, 1616.

*Examen de Ingenios: or the Tryal of Wits * * * Published originally in Spanish by Doctor J. Huarte, and made English by Mr. Bellamy. London. 1698. Svo.*

The following are some of the contents of the book:

That Nature is that which makes a man of abilitie to learne.

How there may be assigned to everie difference of wit, his Science, which shal be correspondent to him in particular: and that which is repugnant and contrarie, be abandoned.

How it may be proved that the eloquence and fineness of speech cannot finde place in men of great understanding.

How it is proved that the Theoricke of Divinitie appertaineth to the understanding, and preaching (which is his practise) to the imagination.

That the Theoricke of the lawes appertaineth to the memorie, and pleading and judging (which are their practise) to the understanding, and the governing of a commonwealth to the imagination.

How it may be proved that of Theoricall Phisicke, part appertaineth to the memorie, and part to the understanding, and the practice to the imagination.

By what meanes it may be shewed, to what difference of abilitie the art of war appertaineth, and by what signes the man may be knowen, who is endowed with this maner of wit.

Teachers and taught.

Maisters (for ought that I can gather) have none other office with their scholars, than to bring learning to their remembrance, for if they have a fruitfull wit, they make them with this only to bring forth woonderful conceits, otherwise they do but afflict themselves, and those whom they instruct, nor ever obtain their desires, and (at least if I were a teacher) before I received any scholar into my schoole, I would grow to many trials and experiments with him, untill I might discover the qualitie of his wit, and if I found it by nature directed to that science whereof I made profession, I would willingly receive him, for it breeds a great contentment in the teacher, to instruct one of good towardlinesse: and if not, I would counsaile him to studie that science, which were mostly agreeable with his wit. But if I saw, that he had no disposition or capacite for any sort of learning, I would friendly and with gentle words tell him; Brother, you have no means to prove a man of that profession which you have undertaken, take care not to loose your time and your labour, and provide you some other trade of living, which requires not so great an habilitie as appertaineth to learning.

His own experience.

There were three companions of us, who entered together to studie the Latine toong, and one of us learned the same with great facilitie, the rest could never make any commendable composition; but all passing on to Logicke, one of those who could not learne Grammar, proved in that art a principall Aegle, and the other two, in the whole, never learned one ready point; then all three comming to heare Astrologie, it was a matter worthie of consideration, that he who could no skill of Latine or Logicke, in a few daies knew more in Astrologie than his maister that taught them, and the rest could never learne it. I then marvelling hereat, began forthwith to make discourses, and play the Philosopher hereon, and so I found that every science required a speciall and particular wit, which reaved from that, was little worth in other sorts of learning.

[Students will find benefit in leaving their homes to go to Universities], for the dandling of the mother, brethren, kindred and friends which are not of his profession, do greatly hinder his profiting. This is plainly seene in the scholars who are native of the cities and places where Universities are seated, none of which (save by great miracle) ever become learned. And this may easily be remedied, by changing of Universities, and the native of one cite going to studie in another. This faring, that a man takes from his owne countrie to make himselfe of woorth and discretion, is of so great importaunce, that there is no maister in the world who can teach him more, and especially, when a man sees himselfe (sometimes) abandoned of the favour and delights of his Countrie.

* * *

Little avails it that a dullard go to learne in the famous places of studie, where there is no chaire of understanding, nor wisdom, nor a man to teach it.

A "Maister" must be sought "who hath a direction and method in teaching."

[Some scholars teach their masters], for doubting and demanding wittily, they make him to understand and answer things so exquisit, as he himselfe never knew nor should have knowne, if the scholler with the felicitie of his wit, had not brought them to his mind: but those who can do this, are one or two at the most, and the dullards are infinit through which, it would do well (seeing this choise, an Examination of Wits for every science is not bad).

In Chapter II the author states:

All that which Galen writeth in this his booke, is the groundplot of this my Treatise, albeit he declares not in particular, the differences of the habilities which are in men, neither as touching the sciences which everie one requires in particular. Notwithstanding, he understood that it was necessarie to depart the sciences among yong men, and to give ech one that which to his naturall habilitie was requisit, in as much as he said, That well ordered common

wealths, ought to have men of great wisdom and knowledge, who might in their tender age, discover each ones wit and naturall sharpnesse, to the end they might be set to learne that art which was agreeable, and not leave it to their owne election. * * *

The Universities alwaies made provision of good teachers, endued with sound learning, and a cleere discerning wit, to the end that they may not instruct the ignorant in errors and false propositions.

Every science should be studied "with order, beginning at his principles, and passing through the midst to the end, without having matter that may presuppose anything before." The scholar should avoid confusion by learning one thing at a time.

Lastly, "Our understanding is not filled by the much which we read in little time, but by that which by little and little it proceeds to conceive and chew upon."

Huarte's book is antiquated, and founded rather upon old medical theories than on educational experience. For instance, the author looks on the differences of men's wits as proceeding from the three qualities—hot, moist, and dry. For each difference of wit he contends there is a science correspondent, and all others should be abandoned. The theory of divinity appertaineth to the understanding, and preaching to the imagination. The theory of the laws appertaineth to the memory, and pleading and judging to the understanding. The governing of a commonwealth relates to the imagination. So, theoretical physics goes with the memory and with understanding, and practice with the imagination.

The author then treats of marriage, the temperaments of men and women, and the probable type of children from different marriages. In the last section he treats of the "diligences to be used for preserving children's wit when formed." He advocates care for aliment, discretion as to nurses, plenty of fresh air, not to sleep in a soft bed, nor be overwarm, or eat much meat.

Richard Carew, sr., also translated the first five cantos of Tasso's *Godfrey of Bulloigne* in 1594.

For Camden's *Remains concerning Britain*, in the second edition, 1605, Carew wrote "An Epistle concerning the excellences of the English Tongue." After dwelling on "the Significance, the Easiness, and the Copiousness of English," he comes to the topic of:

The sweetness of our tongue.

I come now to the last and sweetest point, of the sweetness of our Tongue, which shall appear the more plainly if we match it with our neighbours. The Italian is pleasant, but without sinews, as a still fleeting water; the French delicate, but even nice as a woman, scarce daring to open her lips, for fear of marring her countenance; the Spanish majestic, but fulsome, running too much on the o, and terrible like the Devil in a play; the Dutch manlike, but withal very harsh, as one ready at every word to pick a quarrel. Now we, in borrowing from them, give the strength of consonants to the Italian, the full sound of words to the French, the variety of terminations to the Spanish, and the mollifying of more vowels to the Dutch; and so, like bees, gather the honey of their good properties, and leave the dregs to themselves. And thus when substantialness combineth with delightfulness, fulness with fineness, seemliness with portliness, and currentness with staidness, how can the language which consisteth of all these sound other than most full of sweetness?

It is interesting to compare this passage with that of Mulcaster, page 658. The often-quoted passage from Carew is in this essay, where he compares, for style, Sir Thomas Smith with Plato; Ascham with Cicero; Sir John Cheke with Demosthenes; the Earl of Surrey with Virgil, and Shakspeare with Catullus.

JOHN BAPTISTA NENNA (WM. JONES, TRANSLATOR).

1595.

Nennio. Or A Treatise of Nobility: Wherein is discoursed what true Nobility is, with such qualities as are required in a perfect Gentleman. Written in Italian by that famous Doctor and worthy knight Sir John Baptista Nenna of Bari. Done into English by William Jones, Gent. Printed by P. S. for Paul Linley, and John Flasket and are to be sold at their shop in Paules Churchyard, at the Signe of the blacke Beare, 1595.
 . (4to. 196 pp.)

This translation bears commendatory verses from Edmund Spenser, Samuel Daniel, George Chapman, and Ang. Day. In this treatise the author holds that a man becomes noble by nobility of mind. He hesitates, if not declines, to say which is more excellent and noble, "that which the doctors purchase by their learning or knights by arms." The following is an interesting passage:

Men and women equally noble by learning.

Like-wise women are ennobled by their wisdom and learning. The knowledge of the sciences turned to the great glory and commendation of Cornelia the mother of the Gracchi, of Lelia and Hortensia, the daughters of Lelius and of Q. Hortensius, of Proba Valeria of Rome, and of infinite others. But weapons are not so fit for women * * *. To proceed further, I do altogether equal composed nobility, both of the man and woman, and therefore I need not stand any longer thereon.

EDMUND COOTE (*fl.* 1597).

The following is taken from Mr. Thompson Cooper's account of Coote in the Dictionary of National Biography: Pensioner of Peterhouse, Cambridge, from 1566. Graduated B. A., 1579-80; M. A., 1583. Became headmaster of Bury S. Edmunds, Suffolk, 1596. Resigned, 1597. Subsequent history unknown.

Dr. J. W. Donaldson, in his "Retrospective address" at the tercentenary commemoration of K. Edward's school, Bury S. Edmunds, 1850, thus refers to the "English Schoolmaster:"

The author's object seems to have been a very praiseworthy one—to promote a knowledge of the mother-tongue among those who were not likely to enjoy the advantage of attending such school as this was even in those days: and he did not lose sight of the wants of those who were trained up for Grammar Schools. He recommends ministers of parishes and master tradesmen to use the book, or get it used among their poor people and workmen. To the tradesman he says: "Thou mayest sit on thy shop-board, at thy loom, or at thy needle and never hinder thy work, to hear thy scholars, after thou hast made this little book familiar to them."

And in an earlier passage the same writer says:

The scarcity of this little work, which must have been one of the commonest books in England for nearly one hundred years, may, perhaps, be explained by the hint in the preface, that it was necessary in those days to make provision for a total destruction of elementary books [Dr. D. does not explain why "in those days" especially]. The author says: "I have so disposed the placing of my first book, that if a child should tear out every leaf so fast as he learneth, yet it shall not be greatly hurtful: for every new chapter repeateth and teacheth again all that went before." From this remark we see that, in those days, there were more reasons than one for the repetition system which has lately been revived as a novelty by Ollenderff, and, no doubt, the young learners fully availed themselves of a liberty of destroying their enemy, for which the master himself had made such careful provision.

Mr. A. J. Ellis refers to Coote's "English Schoolmaster," using an edition dated 1673 (Chaucer Soc. Publication: "On Early English Pronunciation,"

p. 1024). He quotes a passage illustrating the pronunciation taught by the "unskilful teacher."

1596.

The English Scholemaister, teachinge all his schollars of what age soever the most easie, short and perfect order of distinct readinge and true writinge our English tonge.

Entered as above, so says the British Museum copy, from which the title-page of the first edition is lacking, on the Stationers' Register, 18 Dec., 1596, to Jackson and Dexter.

The following is a copy of the title-page to the thirty-first edition, 1662:

The English School-Master, Teaching all his Scholars, of what age soever, the most easie, short and perfect order of distinct Reading, and true Writing our English tongue, that hath ever yet been known or published by any. And further also, teacheth a direct Course, how any unskilful person may easily both understand any hard English words which they shall in the Scriptures, Sermons, or elsewhere hear or read: and also be made able to use the same aptly themselves; and generally whatsoever is necessary to be known for the English Speech: So that he which hath this Book only needeth to buy no other to make him fit from his letters unto the Grammar School, for an Apprentice, or any other his private use, so far as concerneth English. And therefore is made not only for Children, though the first Book be meer childish for them, but also for all other, especially for those that are ignorant in the Latin tongue.

In the next Page the Schoolmaster hangeth forth his Table to the view of all Beholders, setting forth some of the chief Commodities of his Profession.

Devised for thy sake that wantest any part of this skill, by Edward [sic] Coote, Master of the Free-School in St Edmunds Bury.

Perused and approved by publick Authority, and now the 31 time Imprinted with certain Copies to write by, at the end of this Book added.

London, Printed by Wm Leyburn, for the Company of Stationers, 1662.

On the other side of title-page in the 1662 edition is an engraving of a school of 12 children, apparently boys and girls, in a prison-like room with very small diamond-paned windows.

Editions are too numerous to mention. At any rate, one published at Dublin in 1673 is named the forty-second. (See Dict. of Nat. Biog., Coote.)

The schoolmaster his profession.

I profess to teach thee that art utterly ignorant to read perfectly, to write truly and with judgment to understand the true reason of our English tongue, with great expedition and pleasure. I will teach thee that art unperfect in either of them, to perfect thy skill in few days with great ease. I undertake to teach my Scholars, that shall be trained up for any Grammar School, that they shall never err in writing the true Orthography of any word truly pronounced: which, what ease and benefit it will bring unto schoolmasters, they best know. And the same proffer do I make all other, both men and women, that now for want thereof are ashamed to write to their best friends, for which I have heard many Gentlemen offer much.

I assure all Schoolmasters of the English tongue, that they shall not only teach their Scholars with greater perfection, but also they shall with more ease and profit, and in shorter time teach an hundred Scholars, than before they could teach forty.

I hope by this plain and short way of teaching, to encourage many to read, that never otherwise would have learned. And so more knowledge will be brought into this land, and more books bought than otherwise would have been.

I shall ease the poorer sort of much charge they have been at, in maintaining their children long at School, and in buying of many books.

Strangers that do now blame our tongue of difficulty and uncertainty, shall by me plainly see and understand those things which they have thought hard.

I do teach the first part of Arithmetick, to know or write any number.

By the practice thereto adjoined, all Learners shall so frame and tune their voices, as that they shall truly or naturally pronounce any kind of style in their Prose or Verse.

By the same practice children shall learn in a Catechism, the knowledge of the Principles of true Religion, with precepts of virtue and civil behaviour.

I have made a part of a brief Chronology, for practising of reading hard words, wherein thou shalt be much helped for the understanding of the Bible, and other Histories: and a Grammar-Scholar learn to know when his Authors both Greek and Latin lived and when the principal histories in them were done.

I have set down a Table containing and teaching the true writing and understanding of any hard English word, borrowed from the Greek, Latin or French and how to know the one from the other, with the interpretation thereof, by a plain English word: whereby the children shall be prepared for the understanding of thousands of Latin words before they enter the Grammar-school, which also will bring much delight and judgment to others. Therefore, if thou understandest not any word in this Book, not before expounded, seek the Table. If I be generally received, I shall cause one uniform manner of teaching; a thing, which as it hath brought much profit unto the Latin tongue, so would it do to all other languages, if the like were practised.

Finally, I have given thee such examples for fair writing, whereby in every School all bad hands may be abandoned; that if thou shouldst buy the like of any other (which thou shalt seldom find in England) they alone will cost thee much more money than I ask thee for my whole Profession.

Method of the teaching. (Given in the preface.)

To return to my teaching Tradesman; if thou desirest to be informed how to teach this Treatise, mark diligently the directions given in all places of the Book, and as thy Scholar is in saying his lesson, mark what words he misseth and them note with thy pen or pin, and let him repeat them at the next lecture, and so until he be perfect, not regarding those where he is skilful. And let his fellows also remember to appose him in their propositions [i. e., to put them to him when they question him. Coote has a chapter (Book ii, cap viii), "How the Teacher shall direct his Scholars to appose one another."]

To Coote's description of his method it is necessary to add that he employs the margin of each page to give directions to the master as to the best way of teaching, or the reason of teaching, the matter of the text.

Example of Coote's employment of the margin of the page. (Taken from the second chapter, which treats of the practice of reading words of three letters.)

<p>This speech is made only of words taught before, where you are not to observe the sense, being frivolous, but only to teach distinct teaching.</p>	<p>Boy, go thou to the top of the hill, and get me home the bay Nag, fill him well, and see he be fat, and I will rid me of him, for he will be but dull as his dam; if a man bid well for him, I will tell him of it; if not, I do but rob him: and so God will vex me, and may let me go to hell, if I get but a jaw-bone of him ill.</p>
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The First Book is entirely (12 pp., 4to) taken up with spelling, in the following order: Words of two letters, three letters, three letters beginning with two consonants, four letters beginning with three consonants, syllables made of diphthongs, syllables of three letters that can end any word with two consonants (e. g., ark, erk, irk, ork, urk), harder instances of words of one syllable with three or four consonants.

In the Second Book spelling is continued for five more chapters, in which words of more than one syllable are discussed. In the Second Book, however, instruction is given by means of dialogues (pp 13-36).

Then follow: A short catechism, sundry observations for a Christian, a prayer, a thanksgiving before meat (and after meat), a prayer for the morning, for the evening, readings from the Psalms, some verses on good manners, entitled "The Schoole-maister to his Scholars." Then comes a paragraph on numeration, as an introduction to chronology. Finally a vocabulary of hard words.

On the last page are these words in an address to the reader:

If notwithstanding my former reasons, thou doubttest that thy little child will have spoilt this book, before it be learned, thou mayest fitly divide it at the end of the second book, or thou mayest reserve fair the written copies, until he can read.

If thou think me either for hardness of rule, or length of matter, unfit for children: plentiful experience in very young ones, (believe him that hath tried) doth daily confute thee. Therefore to dislike before thou hast either tried or diligently read, were either to be rash or unkind. Farewell.

First edition, 94 pages, 4to. In the British Museum copy the written copy has been "reserved fair" by some parent, or at any rate it is removed. In the 1662 edition, owing to closer printing, there are only 79 pages, including the written copy.

The following passage from the preface should be added to the foregoing account, as showing some indication of—

Elementary education in Coote's time.

I am enforced [he says] of necessity, to affect that plain rudeness, which may fit the capacity of those persons with whom I have to deal. The learned sorts are able to understand my purpose, and to teach the treatise without further directions. I am now therefore to direct my speech unto the unskilful, which desire to make use of it for their own private benefit, and to such men and women of Trade, as Tailors, Weavers, Shop-keepers, Seamsters and such others as have undertaken the charge of teaching others. * * * [With this book] thou shalt teach thy scholars with better commendation and profit, than any other (not following this order) teacheth.

NICHOLAS LING.

1597.

*Politeuphuia. Wit's Commonwealth * * * At London, Printed by I. R. for Nicholas Ling, and are to be sold at the West doore of Paules.*
1597. 8vo.

By N. Ling. The book consists of a collection of epigrams on all sorts of subjects. The selection given below shows the view of the work of teaching from an outsider.

Of school.

Definition. A School is a nursery of learning, or the storehouse from whence the mind fetcheth instruction and riches, adorning the soul with mental virtues and divine knowledge.

Tyranny is vile in a School-maister, for youth should rather be trained with courtesy than compulsion.

Because youth by nature is wild, therefore should school-maisters break them by gentleness.

That child is gross-witted, which being thoroughly school-taught, continues still barbarous.

Women, in schools.

Women ought to have as great interest in Schools as men; though not so soon as men, because their wits being more perfect, they would make men's reputations less perfect.

Women prove the best School-maisters, when they place their best delights in instructions.

Children ought to be school-prentices, the space of two or three year.

Two things are to be regarded in schools and school-maisters, first, wherein children must be taught, the next, how they should be taught.

A school should contain four principal rudiments, that is, Grammar, Exercise, Music and Painting.

Grammar is the door to sciences, whereby we learn to speak well and exactly.

Education is a second nature, and the principles learnt in schools is [sic] the best education * * *

If the royalest born creature have not his nature refined with School rudiments, it is gross and barbarous * * *

Lions are tamer than men, if doctrine did not bridle them * * *

Educatio est prima, secunda, tertia pars vitæ, sine qua omnis doctrina, est veluti armata injustitia.

There were many books of selections of the type of Wit's Commonwealth. The following are examples:

Meres (Francis).

*Witts Academy a Treasure of Goulden Sentences Similies and Examples. Set forth chiefly for the benefitt of young schollers. Printed * * * for R. Royston. London, 1636. 12mo.*

Meres (Francis).

Witts Common Wealth. The Second Part. A Treasure of Divine, morall, & Philosophicoll similies, and sentences, generally usefull. But more particularly published, for the use of Schooles. W. Stansby. London, 1634. 12mo.

Cotgrave (John).

*The English Treasury of Wit and Language, collected out of the best Dramatic Poems; methodically digested into common places * * * Lond. 1655. 8°. (pp. 311.)*

Cotgrave (John).

Witts interpreter. The English Parnassus, or a guid to those admirable accomplishments that furnish our English Gentry, in the most acceptable qualifications of discourse, or writings: The Mystery of Eloquence. Theatre of Court-ship: Inditer of letters to be made. 1655. 8°.

Witts recreation for ingenious head pieces, or a pleasant grove for wits to walk in, of epigrams, 700. epitaphs, 200. fancies a number, fantasticas abundance. 8°. Wm. London's Catalogue, published before 1650.

RICHARD DE BURY.

1598.

*Philobiblon Richardi Dunelmensis, sive, De Amore librorum. et Institutione bibliothecæ tractatus pulcherrimus * * * Omnia hac Opere et Studio T. J. Novi. coll. in alma Academia Oxoniensi Socii * * * Oxonia, Excudibat Josephus Barnesius 1598. 4to. (Written in Latin in 1344.)*

I take the following details from Mr. E. C. Thomas's "The Philobiblon of Richard de Bury" (London, Kegan Paul, 1888), a most elaborate and comprehensive bibliography of Richard de Bury, together with preface, biography, text (collated from 28 MSS.), and translation. It is written with such a mastery of and enthusiasm for his subject that everyone desirous to know of De Bury and his Philobiblon must turn to Mr. Thomas's handsome edition for himself.

The edition noted above is the first English edition. It had been printed previously at Cologne in 1473, at Spire in 1483, and at Paris in 1500. In 1599 it reappears with an *Epistola Dedicatoria* to Thomas Bodley, the founder of the great Oxford Library. The editor was Thomas James. In 1832 it was for the first time translated by Mr. J. B. Inglis, and in 1888 Prof. Henry Morley included this translation in his *Universal Library*. Mr. Thomas's translation into English in 1888 is the second which has appeared since De Bury wrote his book in 1344. In 1861 appeared the first American edition, with the text of the 1856 (Paris) edition, as edited by M. Cocheris, and the translation of J. B. Inglis, collated and corrected, with notes by S. Hand. Albany, 1861. Svo.

The Philobiblon is a book lover's book. That it might have had an encouraging effect on bookish education is evident were it not that, as is certain, the book had so slight a circulation and is so seldom referred to.

The genuine enthusiasm of De Bury for books and for book collecting is shown throughout, but the following passage from Mr. Thomas's translation must suffice here (Chapter I, p. 163):

Books as teachers.

Finally we must consider what pleasantness of teaching there is in books, how easy, how secret! How safely we lay bare the poverty of human ignorance to books without feeling any shame! They are masters, who instruct us without rod or ferule, without angry words, without clothes or money. If you come to them they are not asleep; if you ask and enquire of them, they do not chide if you make mistakes; they do not laugh at you if you are ignorant. O books who are alone liberal and free, who give to all who ask of you and enfranchise all who serve you faithfully! by how many thousand types are ye commended to learned men in the scriptures given us by the inspiration of God.

COUNT HANNIBALL ROMEI (J. KEPER, TRANSLATOR.)

1598.

The Courtiers Academie: Comprehending seven severall dayes discourses: wherein be discussed, seven noble and important arguments, worthy by all Gentlemen to be perused.

1. *Of Beautie.*
2. *Of Humane Love.*
3. *Of Honour.*
4. *Of Combate and single fight.*
5. *Of Nobilitie.*
6. *Of Riches.*
7. *Of precedence of Letters or Armes.*

Originally written in Italian by Count Haniball Romei, a Gentleman of Ferrara, and translated into English by I. K[eper?].

Printed by Valentine Sims. (1598. B. L. pp. 295.)

The earliest edition of the Italian text in the British Museum is 1586 (Ferrara), but this is described as *di nuovo ristampati, ampliati e con dilligenza correcti*. Other editions: Venetia 1594, 1604; also in 1891, edited by A. Solerti, with an introduction entitled: "*Ferrara e la Corte Estense nella seconde meta del secolo ecimosesto.*"

In the chapter on the Precedence of Letters or Armes the "two most principall faculties" are said to be—

Understanding speculative, whose object is trueth, the other, practike understanding, which is conversant about that good in humane operations consisting * * * By meane of these two faculties, man acquireth two sorts of perfections: one of which is called Habite speculative, the other, Habite practice. Habite speculative is no other but a knowledge of all those things, that comprehend the universall frame, the which, as they are of three sorts, so be there three severall speculative habites: seeing that some are by their owne proper essence, separate from sensible matter, as is the omnipotent and most excellent God, the Intelligences assisting the Celestiall Spheares, and those, which of the Metaphisicks themselves, are called Transcendentes, as *ens*, good, truth, the thing, and such like, the knowledge whereof, is deservedly called Wisedome: some again by their essence, are wholly drowned in sensible matter, and with motion conjoynd, and these be the heavens, elements, and bodies mixed: the knowledge of these things, is called natural Philosophy. There be yet some other, which in effect can never be separate from sensible matter: notwithstanding naturally they are such, as by part imaginative, and with the minde, they may be considered or imagined: without consideration or imagination of matter, and this is mathematicall knowledge, divided into Geometrie, which handleth continuall quantitie, that is line, superficies and body: and arithmetike, being conversant about discreet quantitie, which is number: there be further some speculative habites comprehended under these three heades, by the Logitians termed, sciences subalternall, or halfe sciences: for in respect of the subject, whereabout they are conversant, they participate of naturall knowledge, but considering the manner, by which they prove their conclusions, they are mathematicall, as those, that embrace mathematicall con-

clusions, for their beginning. Amongst these, is Astrologie, considering bodies, and motions celestial, the like also naturall knowledge doing, but in a diverse manner: then prospective, which intreateth of visible line, Steremetrie, being employed touching solide bodies; and musicke, respecting number harmonically, with other such like: And there be al the sciences and habites, wherewith intellect speculative is adorned, in investigating, and finding out of truth. Practicke habite, is no other, but the knowledge of all those thinges, whereof man is the beginning: and they be divided into two heades, active, and doing, part active, is a firme understanding of those thinges, which appertaine to the good government of himself, his house and finally of the common weale. The doing or performing habite, is that knowledge, which is called arte: this being divided into those mechanically, and liberall. But leaving apart mechanically art, as impertinent to a civil man, we wil affirme, that amongst liberall artes, Grammer is numbred, Rhethorike, Dialect, Poesie, Musicke, both of voice and instrument, painting, Architecture, and the art of Phisicke, and amiddest all these, we wil allot the principallest place to art millitarie, as of al other the most excellent, which by the Philosopher was placed in the number of artes, it having belonging unto it, all those conditions, which in an art are required, that is materiall subject, end, and the instrument, which to the end conduceth, neither wanting there also firm beginnings and principles wherewith every day, great souldiers serve their turn: materiall subject is battel, victorie the end, and armes the molument. There are all the perfections (most famous Queene) which may bring a man to his end, beeing felicitie: of which no doubt, those are the most excellent and worthy of greatest honor, that more readily may make a man happy.

ROBERT CAWDRAY.

1600.

A Treasurie or Storehouse of Similies: Both pleasant and profitable, for all estates of men in generall. Newly collected into Heads and Common-places: By Robert Cawdray. London, Printed by Tho. Creede, dwelling in the Old Chaunge, at the Signe of the Eagle and Childe, near Old Fish-strecte. 1600. 4to.

Education of children.

Like as fruitful fields for lack of tillage wax barren: Or as trees being neglected either bring forth no fruit, or else the same unsavoury, without the diligence of grafting and pruning: Or as dogs be unmeet to hunt the horse, and oxen unapt to the plough, except man's diligence be put thereto: Even so children would become wild and unprofitable, except by diligence and in due time, they should be fashioned and brought in order by good bringing up.

Horse keepers and teachers.

Like as noblemen and gentlemen are desirous to have a good and skilful horsekeeper, that can keep their horses well and they spare not to give great stipends to such: Even so how much more ought Christian parents to be desirous to have and maintain a good schoolmaster that might godlily bring up their children in virtue and wisdom.

Military training and education.

As Alexander the Great attained to have such a puissant army, whereby he conquered the world, by having children born and bred up in his camp, whereby they became so well acquainted and exercised with weapons from their swaddling clothes, that they looked for no other wealth or country but to fight: Even so if thou wouldst have thy children either to do great matters, or to live honestly by their own virtuous endeavours, and not to gape unjustly for other men's goods, but to be content with the blessing of God upon their labours, thou must acquaint them with pains-taking in their youth and so bring them up in the nurture and information of the Lord.

There are thirteen other similes on the subject of the education of children.

The schoolmaster.

As it is the part of a good husband, to understand the nature and fertility of the ground, which he doth till: So it is the part of a good Schoolmaster, to discern the disposition and nature of his scholar.

The scholar.

As a drop of water falling from the house-eaves, weareth and holloweth the hard stone; not by force, but by his [its] often falling; Even so a Scholar proveth learned, not by power or strength, but by much diligence, and great reading.

As Appelles became an excellent painter, because there was never a day, but he laboured himself to some learning: So in like manner, a Diligent Scholar, by daily applying of his learning, and often exercising of virtue, attaineth to perfect honour and virtue.

There are five other similes on the subject of the scholar.

JOHN DAYE.

c. 1600.

Peregrinatio Scholastica or Learneinges Pillgrimage. Containeinge the straundge Adventurs and various entertainements he founde in his traveilles towards the shrine of Latria. Meliora speramus: Composde and divided and derided into morall Tractates By John Daye Sometimes student of Gunvill and Caius Colledge in Cambridge.

This work was published privately at the Chiswick Press, 1881, by Mr. A. H. Bullen, from a MS. in the British Museum, numbered Sloane MS. 3150, a small 4to of 32 leaves, date unknown. In his introduction Mr. Bullen says: "Day seems to have possessed in no ordinary degree the rare art of disengaging the mind from painful associations and bathing it in a stream of pleasurable feelings. In the winter of his age, battered and broken by neglect, Ben Jonson put forth the sweetest flower of his invention. Something of the graceful fluency and arch fancy that inform the Sad Shepherd may be found here and there in Day's tract." The date of his death is unknown. He wrote as early as 1593 and as late as about 1620.

The discourse is divided into 20 Tractates. From Tractate 14 onwards is a sort of Pilgrim's Progress for learning under the name of Philosophus. The following are the titles:

- Tractate 14. Learning about to see his infirmity is dissuaded by Error in the borrowed habit of Alethe.
- Tractate 15. By following Error, Learning is cast upon the island Necessitas: what he saw there; how narrowly scapt the rock of despair; came acquainted with Industry, who brought him out of the island and wished him to seek a service.
- Tractate 16. Learning's coming to Superbla's Court and Averitia's City; of the entertainment he found in both.
- Tractate 17. Learning goes to a suburb Justice and a country Vicar; his entertainment and what it was.
- Tractate 18. Learning, notwithstanding the help of Industry, comes to Beggar's Bush; the country described and the inhabitants; where whilst he took a nap, he had a vision.
- Tractate 19. Learning meets Experience at Weeping Cross, who in a fountain, showed him many strange marvels: by his advice he sends Industry in search of Chronos and Alethe, and gives him the true solution of his dream.
- Tractate 20. Industry's quest of Inquiry for Time: where he missed and at last found him: Truth enlarged, Experience shows him the right way to Latria's shrine; et hic Peregrinationis Finis.

The scholar in the city.

At the name of scholar, they stopped their noises and cried Lord have mercy upon us! that a scholar should have no more wit but to think he would find entertainment in the City * * * Being a scholar, and a poor one too, they had no use for him except it were once in a coronation to make a speech for the entertainment of a prince, a pageant at the instalment of a praetor, a set oration for the constable, to give the sleepy watch their charge, or an apology for the churchwarden to excuse the picking of the poor man's box; and for those employments none so fit as the common chronicler.

His experience in the country.

Philosophus next tries the country. Coming to a house, he ventures to approach the owner, who happens to be a justice of the peace. With difficulty he escapes being arrested as a vagrant. He then calls on the vicar. The following is the racy sketch of the vicar:

Sir, you are very welcome (he says), and could my poor living afford it, I would make you better welcome. I love and honour scholars having served a full 'prenticeship to the trade myself; but as my honest neighbours here know, I have but a poor vicarage, which one Mr. Simon-Money, or more familiarly Simony, helped me to * * * And though I have no great store of Learning lying by me (for as you know, *omnia mea mecâ porto* is the old word amongst scholars), yet I have enough to read a marriage and burial, and if need be, to say a homily of a holiday * * * My honest parishioners are a company of turbulent mechanics, and yet so proud in their own conceit, I have much ado to please them; for but for reading one Latin word in an homily (and that was out afore I was aware to), some of them called me a papist and shun me as a puritan would do a cross, and never drunk above twice or thrice in my company since. And therefore having neither occasion to use learning nor means to maintain it if I had it, heares the tother half can and so I take my leave of you.

In the twentieth Tractate, Industry, are the places where he sought time.

How time is used at the universities.

I found Time of much respect there. It was against a commencement, and there was such scrambling for Time as passed thought; one ready to proceed bachelor, was put back because he wanted Time; another to go out Master and he wanted Time; and many a good scholar that had learning enough was stayed for want of a little time, and some dunces that had too much time, though little or no learning, went out. There was much tugging for Time, he thought he should have been torn apieces amongst the seniors, and therefore stole out of their company to a sort of freshmen that had great need of Time indeed: who, for joy they had got him amongst them, sent for good cheer and wine to make merry with Time; when falling awliffing tobacco and drinking healths, they made Time sick. Whereupon they enticed him out to take the air; and being hot some went to swim at freshman's boat, some at Paradise, and some in Barnwell Pool, some to Cherry Hinton; some to Hogmagog hills, but a great sort to Batts Folly: when Time seeing himself so much neglected, he in a pelting chaise left them.

SAMUEL DANIEL.

1602-3.

Musophilus, or Defence of all Learning. 1602-3?

Samuel Daniel was born in 1562 and died in 1619. His father and a brother were music masters. Though perhaps Daniel had nothing new to offer as to teaching or learning, his enthusiastic and eloquent words worthily proclaim the old love of learning and deserve to be recalled. As a teacher Daniel can not be spoken of very highly. His work of tuition, says Mr. Sidney Lee, was "irk-some" to him. Mr. Lee quotes a letter written to Sir Thomas Egerton in 1601, in which Daniel says: "Whilst I should have written the actions of *men* I have been constrained to bide with *children*, and contrary to mine own spirit, put out of that sense which nature had made my part." Yet his pupil, the Lady Anne Clifford, seems to have been a girl of great intelligence and very interesting.

The blessing of letters.

O blessed Letters, that combine in one,
 All ages past, and make one live with all;
 By you, we do confer with who are gone,
 And the dead-living unto council call:
 By you th' inkhorn shall have communion
 Of what we feel, and what doth us befall.
 Soul of the world, Knowledge, without thee,
 What hath the world that truly glorious is?

The blindness of the age.

How many thousands never heard the name
 Of Sidney, or of Spenser, or their books?
 And yet brave fellows, and presume of Fame,
 And seem to bear down all the world with looks?
 What then shall they expect of meaner frame,
 On whose endeavours few or none scarce looks?
 Do you not see these Pamphlets, Libels, Rimes,
 These strange confused tumults of the mind,
 Are grown to be the sickness of these times,
 The great disease inflicted on mankind?

The infinitude of knowledge.

Daniel suggests that if the learned obtained a better reward for their labors:

Then would they [the Academies] onely labour to extend
 Their now unsearching spirit beyond these bounds
 Of others' powers * * *
 Discoursing daily more and more about,
 In that immense and boundless Ocean ^a
 Of Nature's riches; never yet found out,
 Nor fore-clos'd, with the wit of any man.

In praise of the English language.

Whenas our accents equal to the best,
 Is able greater wonders to bring forth:
 When all that ever hotter spirits exprest,
 Comes bettered by the patience of the North.
 And who, in time, knows whither we may vent
 The treasure of our tongue, to what strange shores
 This gain of our best glory shall be sent,
 T' enrich unknowing Nations with our stores?
 What worlds in th' yet unformed Occident
 May come refin'd with th' accents that are ours?
 Or, who can tell for what great work in hand
 The greatness of our style is now ordain'd?
 What powers it shall bring in, what spirits command,
 What thoughts let out, what humours keep restrain'd,
 What mischief it may powerfully withstand,
 And what fair ends may thereby be attain'd.

It may appear to be straying from the subject of writers on education to include especially this last quotation from Samuel Daniel, but to anyone studying the history of English education the direct call to the consideration and study of English writers, especially in the earlier stages, is a point of great importance; first, directly in itself, and, secondly, indirectly in the competitive position of the vernacular toward the displacement of the classics as the be-all and end-all of the subjects of educational discipline. The direct reference to the "unformed Occident," and the importance of the preservation of the integrity of English and honor for it, because of its indefinitely greater influence there, makes the passage one which should be better known than it is in both England and America.

MICHAEL DE MONTAIGNE (JOHN FLORIO, *Translator*).

1603.

The Essayes or Morall, Politike, and Militarie Discourses of Lo: Michaell de Montaigne, Knight. Of the noble Order of St. Michaell, and one of

^a Cf. Sir Isaac Newton: "I seem to have been only a boy playing on the sea-shore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."

*the Gentlemen in Ordinary of the French King, Henry the third his Chamber. First written by him in French. And now done into English by * * * John Florio. Lond. 1603. folio.*

Other editions:

London, 1613. fol.

London, 1632. fol.

London, 1886 (1885). Svo. G. Routledge & Sons. Edited by Henry Morley.

London, 1889, 1890. 32mo. The Stott Library.

London, 1891. Svo. Sir John Lubbock's Hundred Books.

London, 1892-1893. Svo. Edited by George Saintsbury in "The Tudor Translations."

London, 1897. Svo. The Temple Classics.

In the International Education Series, volume 46, Dr. L. E. Rector has put together the chapters in Montaigne which deal with education. These include translations:

Of the education of children, Book I, Chapter XXV.

Of pedantry, Book I, Chapter XXIV.

Of the affection of fathers to their children, Book II, Chapter VIII.

Of liars, Book I, Chapter IX. Book II, Chapter XVIII.

Of habit, Book I, Chapter XXII.

Of presumption, Book II, Chapter XVII.

Of physiognomy, Book III, Chapter VIII.

Of anger, Book II, Chapter XXXI.

Of the art of conversation, Book III, Chapter VIII.

Of idleness, Book I, Chapter VIII.

Of experience, Book III, Chapter XIII.

History, Book II, Chapter X; Book I, Chapter XVI; Book I, Chapter XX.

Dr. W. T. Harris says in the preface: "Montaigne stands for very much more as a literary man than as an educational reformer." And again, "Montaigne is a tonic or a sort of corrective against pedantry."

The first French edition of Montaigne's Essays was published 1580-1588, John Florio's translation into English in 1603.

See also Prof. S. G. Laurie's Montaigne as an Educationalist, in his *Training of Teachers and other Educational Papers*, page 231.

OTHER WORKS OF JOHN FLORIO.

A Worlde of Wordes; a most copious and exact Dictionarie in Italian and English, Collected by John Florio. Lond. 1598.

And in 1611 the 2d edition, entitled: "Queen Anna's New World of Words." The 3d edition was revised by Giovanni Torriano and published in 1659 as *Vocabolario Italiano e Inglese*. Florio published also books of Proverbs:

First Fruites, which yeelde familiar speech, merie proverbes, wittie sentences, and golden sayings, also a perfect Introduction to the Italian and English tongues. T. Dawson, London, 1578. 4to.

Second frutes to be gathered of twelve Trees of divers but delightsome tastes to the tongues of Italian and Englishmen. To which is annexed his Gardine of Recreation, yeelding six thousand Italian Proverbs. Ital. and Eng. Printed for T. Woodcock, London, 1591. 4to.

WORKS FOR INSTRUCTION IN ITALIAN.

The following are amongst the books up to 1660 for instruction in Italian.

Thomas (William).

*Principal Rules of the Italian Grammar, with a Dictionarie for the better under standynge of Boccacc, Petrarcha and Dante * * * Newly corrected and imprinted.—B. L. 2 pts. T. Powell, London 1562, 1567. 4to. First ed. 1550.*

Grantham (Henry).

La Grammatica di M. Scipio Lentulo da lui, in Latina Lingua Scritta et hora nella Italiana et Inglese tradotta da Henry Grantham, i. e., an Italian Grammar, written in Latin by Scipio Lentulo, a Neapolitan, and turned into English. Lond. 1575. Svo. 1587. 16mo.

Rowland (David).

A comfortable ayde for Schollers, full of variety of sentences, gathered out of [the work of] an Italian author (intituled in that tongue, Specchio de la lingua Latina) by D. Rowland. T. Marshe, London, 1578. Svo.

Hollyband (Claudius).

Campo di fior; or else, The Flowrie Field of four Languages of M. Claudius Desainliens, alias Holiband; for the furtherance of the learners of the Latine, Frenche, English, but chiefly of the Italian tongue. Lond. 1583. 16mo.

Merbury (C).

Italian Proverbs. 1585.

Maraffi (Bartolommeo).

A fine Tuscan historie called Ernalti & Lucinda, Engl. and It.

The Italian Schoolemaister etc. (C. Desainliens) 1597. Svo. Also 1608.

Torriano (Giovanni).

*The Italian Tutor or a new * * * Italian grammar * * * to which is annexed A display of the Monasillable Particles of the language, by way of alphabet. As also, certaine dialogues made up of Italianismes or Niceties of the Language with the English to them. 2 pts. T. Paine, London, 1649. 4to.*

Torriano (Giovanni).

*Select Italian Proverbs: The most significant, very usefull for Travellers, and such as desire that Language. The same newly made to speak English, and the obscurest places with Notes illustrated, useful for such as happily aim not at the Language, yet would see the genius of the Nation. By Gio. Torriano * * * 1649. Svo.*

Torriano (Giovanni).

*Della Lingua Toscana-Romana. Or, An Introduction to the Italian Tongue. Containing such grounds as are most immediately useful, and necessary for the speedy and easie attaining of the same * * * Lond. 1657. Svo. (Mentioned by W. C. Hazlitt.)*

CHAPTER IX.

JUVENILE CRIMINALITY IN GERMANY.^a

[By EDGAR LOENING, in *Jahrbüher für National-Oekonomie und Statistik*, Jena, 1901.]

Since the year 1882 the statistical bureau of the Empire has published successive statements and reports on the criminality of juvenile persons over 12 but under 18 years of age. These do not give information on all important conditions necessary for forming an opinion, but they are sufficiently complete to show the increase of crime among youth. They contain a serious warning to the State and to society. It must be remembered that according to the German criminal code (par. 55) persons who commit a punishable act before the completion of their twelfth year of age can not be legally prosecuted for it, and that according to paragraph 56 persons who commit a punishable act before the completion of their eighteenth but after their twelfth year of age can be sentenced to punishment only if the court decides that upon commission of the act they possessed a full knowledge of their culpability. The imperial criminal statistics take into account only the sentencing of juvenile persons on account of crimes and transgressions against imperial laws. All violations of and punishable offenses against local laws are omitted in the summaries. Furthermore, the following statements, taken from the imperial criminal statistics, do not include sentences pronounced for violation of military duty and transgressions against industrial laws which are not taken into question in the judging of juvenile criminals.

Statistics show that since 1882 the number of juvenile persons convicted has increased not only very considerably, but even in greater proportion than the number of convicted adults. It has also increased in greater proportion than the number of children 12 to 18 years has increased. The following table for the years 1882 to 1896, inclusive, furnishes the proof for this assertion:

TABLE I.

Years.	Juveniles.		Adults.	
	Number sentenced.	Number sentenced to every 100,000 juveniles 12-18 years of age.	Number sentenced.	Number sentenced to every 100,000 adults.
1882	30,697	568	281,141	1,068
1883	27,956	549	280,535	1,061
1884	31,319	577	293,666	1,103
1885	30,654	559	290,600	1,083
1886	31,400	564	297,383	1,098
1887	33,068	575	298,152	1,096
1888	32,983	561	291,095	1,055
1889	36,739	613	307,115	1,096
1890	40,914	662	315,350	1,112
1891	42,201	670	325,236	1,143
1892	46,418	727	349,527	1,217
1893	43,585	683	355,792	1,223
1894	45,238	711	369,206	1,252
1895	44,114	698	375,988	1,251
1896	43,962	697	376,961	1,239

^a Articles on similar subjects published in previous Reports of the Commissioner of Education:

Education of neglected and depraved children. An. Rep. of 1889-90, p. 295.

Reform schools in the Grand Duchy of Baden, An. Rep. of 1895-96, p. 158.

Illiteracy in Europe, An. Rep. of 1897-98, p. 236.

Children's claim upon childhood, An. Rep. of 1899-1900, p. 810.

Up to the year 1889 the fluctuations of these figures are not very great, but from that year on crime has been on the increase among the young as well as among adults, to a much greater extent with the former, however, than with the latter. With the former, indeed, the increase is not steady. During the whole period the highest figure was reached in 1892, in which year the number of those sentenced among 100,000 of the same age was 25 per cent more than in the year 1882. In the following years the number decreased, but did not fall below that of 1891. In the year 1896 the proportion of increase over 1882 was 22.7 per cent. The number of adults sentenced has also increased considerably since 1891. The highest figure was reached in 1894; the two following years show a slight decrease. Still the increase is not so large as with juveniles. Compared with the year 1882, the number of those sentenced among 100,000 adults in the year 1894 increased 17.2 per cent, in the year 1896 the increase amounted to 16 per cent.

For the succeeding years the absolute numbers can be obtained only from the statements for the year 1897 (Imperial Statistical Bureau, vol. 120) and from the quarterly statistical reports of the same bureau for 1899 and 1900, as the complete reports on crime for those years have not yet appeared. The following statement refers to those sentenced for violations of the criminal code and other imperial laws.

	1897.	1898.	1899.
Adults	418,256	429,736	430,662
Juveniles between 12 and 18 years	45,329	47,975	47,476

During all these years theft ranks first among the punishable acts for which juvenile persons have been sentenced. Though the different years show great variations, still the number of cases of theft is about the same for 1896 as for 1882. Whereas in the latter-named year 344 among 100,000 juveniles were sentenced for theft, the number in 1896 amounted to 340. In 1888 the proportion decreased to 309; it rose to 397 in 1892.

The considerable increase in the number of convictions of juvenile persons is, in the first place, due to the fact that sentences for assault have been pronounced in a great many more cases than formerly. In 1882 the number convicted among 100,000 amounted to 63; in 1896 to 130. The number of convictions for willful damage to property is also noticeably larger, having increased from 31 to 46 in every 100,000. If we sum up these punishable acts, proceeding mostly from brutal and violent disposition, as unlawful acts of violence, they form 64 per cent of the increase of criminality among juveniles. With respect to other violations and transgressions of which juvenile persons are guilty there is also an increase, but not enough for far-reaching conclusions to be drawn. It must not be forgotten, moreover, that in condemning juveniles a weighty factor is taken into consideration. As we have said, paragraph 56 of the criminal code says that juveniles can be sentenced only if the judge has determined that, while committing the act, they possessed a full knowledge of their culpability. With children, especially those under 14 years of age, such a decision is made with great difficulty. The psychical condition of children whose moral judgment is not yet matured must be investigated, and the judge's subjective opinion has a wide scope in forming this decision. This is shown in the reports for the years 1894 and 1896, in the number of cases in which juvenile defendants were acquitted in the different provincial court districts on the plea of insufficient knowledge of their culpability according to paragraph 56 of the criminal code.

A comparison between the increase of criminality among juveniles and the extraordinary growth of the population in large cities is pertinent. Naturally the proportion of crime among children growing up in large cities and exposed to all kinds of temptation is larger than among those in the country and in small towns. Besides, punishable acts committed by juvenile persons are much more frequently brought into notice and legally prosecuted in large cities than in rural districts. The growth of population in large cities, therefore, alone explains an increase of juvenile criminality. This, however, can not be proved by statistics, as in the reports on criminality in the Empire the figures refer to provincial court districts, governmental districts, etc., but not to large cities separately considered. Even though the districts of Hamburg, Berlin, Nuremberg, and Munich are distinguished by a large percentage of juvenile criminality, they are outdistanced by the district of Zweibrücken, which contains no large city. Others, particularly rural districts, as Marienwerder, Posen, Bamberg, etc., nearly or quite surpass them. The provincial court districts of Cologne, Frankfort-on-the-Main, Stuttgart, and Colmar are among those which present the lowest proportion of juvenile criminality.

Among every 100,000 inhabitants who had completed their twelfth but not their fourteenth year, and who had completed their fourteenth but not their eighteenth year, the following numbers were sentenced in the provincial court districts in 1896:

TABLE II.

District.	Juveniles sentenced—	
	Between the ages 12 and 14.	Between the ages 15 and 18.
Hamburg.....	775	1,305
Zweibrücken.....	761	1,733
Berlin.....	534	1,043
Naumburg.....	483	952
Posen.....	475	925
Marienwerder.....	440	1,168
Dresden.....	418	816
Breslau.....	409	937
Nuremberg.....	404	1,222
Bamberg.....	400	975
Brunswick.....	369	866
Stettin.....	356	844
Rostock.....	344	736
Munich.....	330	1,212
Hamn.....	321	679
Jena.....	306	1,056
Königsberg.....	304	1,025
Celle.....	301	634
Darmstadt.....	299	837
Augsburg.....	284	968
Cassel.....	281	522
Oldenburg.....	277	552
Frankfort-on-the-Main.....	237	829
Kiel.....	236	502
Cologne.....	217	628
Stuttgart.....	217	726
Karlsruhe.....	176	931
Colmar.....	111	595

The great variations in the numbers relative to those who are between 12 and 14 years of age are partly explained by the fact that in the different districts the regulation of the criminal code that juvenile persons are to be acquitted if they do not possess a full knowledge of their culpability is administered in an entirely different manner for the class of children not yet 14 years old. In the whole Empire, during the years 1894 to 1896, 10.8 per cent of the children between 12 and 14 years of age brought before the court were

acquitted on the ground of paragraph 56 of the criminal code. The figures relative to the separate provincial court districts depart widely from this average. Whereas in Brunswick the number of discharges or acquittals formed only 0.5 per cent, in Colmar it was 57.1 per cent; Cologne, 37.2 per cent; Hamm, 27.1 per cent, etc. In twenty-one of the twenty-eight judicial districts (see Table II) the number was below the average calculated for the Empire. There is no question that these great variations are attributable not alone to the differences in intellectual development of the defendants, but also, and chiefly, to the different manner in which the courts administer the legal provision of paragraph 56.

The general opinion of those well informed on the subject is that the criminal code has set the age for punishment by law too low—that the close of the fourteenth instead of the twelfth year of age should be decided upon. The criminal code assumes that responsibility is dependent upon the degree of mental development. Anyone whose intellect is so far developed that he understands the culpability of his actions is accountable or responsible to the law. "The perpetrator must be able to understand that his duty requires the omission of the special act, and that by its committal he exposes himself to punishment by the criminal law." (Motives to the proposed criminal code of the North German Confederation, p. 73.) Proceeding upon this assumption, the criminal code admits that, as a rule, children have not attained this degree of mental development before the completion of their twelfth year. Those under 12 have been declared absolutely free from the responsibility for criminal action. If this fundamental idea were correct, the question might be raised whether this age limit be not too high, and whether, in Germany, the country of general compulsory education, children do not attain maturity of judgment sufficiently at about 10 years. Most children who have completed their tenth year understand that theft, assault, injury to property, etc., are criminal acts and entail punishment by law. But the thought of making the degree of mental development alone the standard is not right. The law makes adults responsible for their acts, not only because it presupposes their knowledge of the culpability of their actions, but also because it presupposes with them a maturity of moral character which enables them to resist the impulse to perform an act contrary to law. Generally, however, children attain maturity of character later than the degree of understanding required to recognize culpability of action. So long as this does not exist punishment of children by law is as unjust and injudicious as the punishment of a person of unsound mind who may be capable of considering the consequences of his acts, and recognizing their culpability, but who is unable to exercise free will because of the diseased condition of his mind. (Criminal code, paragraph 51.) If a child has not attained the degree of intellectual judgment or moral development required by law of adults, and if he shows criminal inclinations, he stands in need of education rather than legal punishment. Experience has proved that this degree of moral maturity is not attained by children in Germany, as a rule, before the close of the fourteenth year. The nature of the case does not permit exhaustive proof. However, upon the ground of general experience, nearly all German States have decided upon the completion of the fourteenth year for the close of the term of school age, and evangelical parochial churches, as a rule, admit children to confirmation only after they have completed their fourteenth year. It is well known that the knowledge to be gained in elementary schools and required for confirmation in the churches can be obtained by most children in less time. But the term of school attendance must not be shortened, because the schools are not only institutions of learning, but also, and chiefly, of education or training; and because the church requires a certain degree of moral

maturity it does not admit children to confirmation before the close of their fourteenth year.

In the statistics of crime for the year 1896 especial attention is given to the criminality of children at the age between 12 and 14. (Explanatory Statements, Vol. I, p. 64; Vol. II, p. 35.) In the three years, 1894, 1895, and 1896, the number of convicted children between 12 and 14 (completed), like that of convicted children in general (up to 18 years of age), had decreased somewhat. In these years it amounted to 8,215, 7,601, and 7,687, respectively, or 17 to 18 per cent of the total. Nearly all punishable acts committed by children of 12-14 are perpetrated against property (in 1896, 6,851 out of 7,686, or 89 per cent), and among these most were cases of theft (5,340). Other punishable acts on which sentence was passed by the courts were injury to property (549), receiving stolen goods (375), peculation (222), fraud (141), and assault or dangerous injury to the person (515).

Just at this age, however, cases are very frequent in which children, in spite of their understanding the culpability of their acts, because of bad training and neglect, lack that maturity of moral character without which a free exercise of will in the sense of the law can not be presupposed. The judge who feels justified in interpreting the law liberally will clear a child on the ground of deficient understanding, because he considers the infliction of legal punishment prejudicial to the child. On the other hand, the judge who feels bound strictly to follow the letter of the law will sentence a child, even though unwillingly. Chiefly to these circumstances are attributable the great variations in the number of discharged cases which are decided in conformity with paragraph 56 of the criminal code in the different provincial court districts. In consequence the greatest care must be exercised in making use of statistics in forming an opinion on the criminality of children from 12 to 14 years of age.

Of all the cases to which paragraph 56 of the code applied, during the years 1894 to 1896, more than half were of children who had not completed their fourteenth year (2,547 out of 4,774). But on the same grounds, statistics are likewise not a sure standard for judging the criminality of children from 14 to 18. The figures here also show the greatest variation for the different districts, though the order of the districts changes accordingly as the arrangement is made with the older or younger class of children for a basis. (See Table II.)

When younger children are acquitted because of deficient understanding under the provisions of paragraph 56, section 2, of the code, the court at once decides whether they are to be returned to their families or placed in a reform school. However, the statistics on crime give no information as to what percentage of the number discharged in pursuance to paragraph 56, section 2, have been subjected to compulsory education (in reform schools) by decision of the courts. The statistics for 1899 of penal institutions and prisons, the administration of which belongs to the department of the interior of Prussia, contain a few statements concerning those who were subjected to reform school education in Prussia during that year under the provisions of paragraph 56 of the criminal code, but do not give the total number of those who were acquitted under that paragraph. Happily the imperial statistics give this number for 1896. In that year 1,129 juveniles were acquitted in Prussia on account of deficient comprehension of their culpability. In the year 1899-1900, the figures of which differ but little from those of the year 1896, there were 323 sent to reform schools; to these may be added 43 children arrested for begging, vagrancy, disorderly conduct at work, etc. (violations of par. 361 of the criminal code), making a total of 366. Of these, 202 had not completed their fourteenth year of age. On March 1, 1900, there were in reform schools 1,718 juveniles, of whom 1,351 were boys and 367 girls. All these were sent there by

order of the criminal courts in pursuance of paragraph 56 of the code. The five State institutions of this kind held 608 of the 1,718 children; 306 were in communal, religious, or private institutions of this kind; 44 in families not their own, and 760 were apprenticed or in domestic service, but all were considered under "Zwangserziehung" (compulsory training). [See also Annual Report of the Commissioner of Education of 1901, chapter "Education in Central Europe," where the law relating to reform schools and compulsory training in homes is explained.—Translator.]

In judging of criminality and of the efficacy of punishment in criminal courts, the number of juveniles who have been punished before, and their proportion to those punished for the first time are of especial importance. Statistics admitting of comparison date only from 1889. According to these the number of juveniles previously punished from 1889 to 1896 rose from 5,590 to 8,316, or from 152 to 188 in every 1,000 children sentenced. Consequently the number of those previously punished in 1889 formed 15.2 per cent, in 1896 18.8 per cent, of the total. Among those previously punished the number of those sentenced several times, in proportion to those punished only once before, shows no decided increase, though the figures vary for the different years. The following table shows the number of juvenile persons sentenced, out of every 1,000, once before or oftener:

TABLE III.

Year.	Sentenced before.				
	1 time.	2 times.	3 to 6 times.	6 or more times.	Total.
1889.....	95	33	22	2	152
1890.....	100	37	23	2	162
1891.....	104	39	23	2	168
1892.....	105	39	26	2	172
1893.....	105	39	27	3	174
1894.....	111	40	31	4	186
1895.....	111	41	31	3	186
1896.....	110	40	34	4	188

It is to be remembered, furthermore, that those punished before their eighteenth year of age often fall into criminal habits later in life and form no small percentage of inmates of prisons. Twenty-seven per cent (1,473 out of 5,324) of those confined in the penal institutions of Prussia in 1899-1900 had been sentenced to imprisonment before their eighteenth year of age. According to investigations made in Prussia in 1894 as many as 9,489, or 53 per cent, of the inmates of penal institutions had served three or more severe sentences of imprisonment (in a jail, workhouse, or house of correction), for terms of which one was at least six months or longer. Of these, 8,789, or 93 per cent, were designated as incapacitated from participating in any lawful social life, and of these 34 per cent had been imprisoned before they were 18. (Motives of the Prussian bill for reformatory training of minors. Supplements to the stenographic reports of the transactions of the upper house of the diet, 1900, p. 28.)

If any conclusions can be drawn from these statistical reports they prove that the threat of imprisonment does not lessen juvenile criminality, but rather tends to increase it. Of the 43,962 cases of juveniles convicted of crimes or violations of the law in 1896, 7,191 were fined, 9,104 reprimanded, and the remaining 27,667 sentenced to confinement. Of these latter, 62 were punished by mere detention, the others by imprisonment. In 5,524 cases the terms were less than four days; in 4,921 between four and eight days; in 6,851 cases between eight and thirty days; in 4,560 cases between one and three months;

in 4,863 cases between three and twelve months; in 911 cases between one and two years, and in only 287 cases two or more years.

A comparison of sentences in the years 1889 to 1896 shows that the courts are lately more cautious in pronouncing sentence of imprisonment upon the young and more frequently reprimand or fine. In 1889 as many as 740 out of 1,000 convicted juvenile persons were sentenced to imprisonment; this number decreased steadily to 631 in 1896. On the other hand, the number of sentences involving fine or reprimand per 1,000 during the same period rose from 107 to 162, and from 151 to 206, respectively. The reason for this is not so much that punishable acts of juveniles have become less serious or are judged more leniently, but that the courts have become more and more convinced of the uselessness and even danger of short terms of imprisonment for young persons. The decrease is exclusively confined to imprisonment for terms from a day to three months. Whereas in the year 1890 as many as 482 out of 1,000 were sentenced to such short terms, the number fell to 391 in 1896.

In fact it requires no proof that, as a rule, short terms of imprisonment exert a demoralizing influence on juvenile offenders. Paragraph 57 of the criminal code requires that juvenile offenders shall be confined in institutions especially arranged for this purpose. They must be protected against the evil influences that may be exerted by adult criminals over them. During the brief period which children spend in prisons, what is most necessary for them as regards their own interests, as well as the interests of the State, i. e., education and strengthening of their moral character, can not be afforded to them. When they are released they bear a taint which makes it difficult for them to obtain honest work, and consequently in many cases power of resistance to temptation and evil inclinations is weakened; and in the institution itself, where there is a constant change of inmates, the sense of honor is blunted, and better instincts yield to the temptation and contagion of the worst. A brief intercourse is sufficient to make acquaintances which are kept up after the term of punishment is over. Statistics of crime do not record the transgressions (*Uebertretungen*) and sentences due to such. It may be positively asserted, however, that the number of juvenile persons who are sentenced to short terms of confinement, not exceeding three weeks in case of children, for mere transgressions is very large.^a

There is no exaggeration in saying that serving short terms of imprisonment exercises a debasing influence upon youth and increases their criminality and their tendency to relapse. If the number of children sentenced by law more than once is on the increase, the law can not be cleared of being an accessory.

Moreover, the educational and improving effect of fines and reprimands must of course not be rated too highly. In the case of school children and apprentices fines often affect the parents more than the children, and even when such is not the case, the thoughtlessness of youth quickly gets over the effect of an insignificant fine. In those cases in which a child has been induced to commit a punishable act through thoughtlessness or immaturity of moral character, while the moral germ is still untainted, the punishment of reprimand is often very effective and wholesome.

In pursuance of paragraph 57 of the criminal code, this sentence can be pronounced only in very light cases and when the act is not a crime. If the act is a misfeasance, the court may have recourse to reprimand, as well when the same offense, if committed by an adult, is threatened with imprisonment alone as when it is threatened with imprisonment or fine. Statistics prove that the

^a The Germans distinguish three kinds of violation of the law: (1) *Uebertretung*, = transgression or trespass; (2) *Vergehen*, = misdemeanor or misfeasance, and (3) *Verbrechen*, = crime. (Translator.)

courts, in case of offenses punishable by imprisonment alone, incline toward reprimand, if the offenders are children. Simple cases of theft and receiving stolen goods are subject to imprisonment exclusively. (Criminal code, pars. 242, 258, sec. 1.) Out of 1,000 children sentenced for simple theft, 331 received a reprimand; 401 received the same sentence for concealing stolen goods. Mostly all those who escaped with reprimand for stealing or receiving stolen goods are children under 14 years of age.

In cases of violation punishable by imprisonment or fine, the courts have generally passed the sentence of fine in preference to that of reprimand. In 1896, out of 1,000 cases of damage to property, 428 were sentenced to fines and 263 to reprimand; out of 1,000 cases of assault and injury to the person, 526 were sentenced to fines and 155 to reprimand; out of 1,000 cases of disturbance of the domestic peace, 288 were sentenced to fines and 122 to reprimand, etc. The total number of instances in which youthful persons are punished for an offense by reprimand is always very large. The supposition seems justifiable that the courts very often select this mode of punishment, not because they are convinced that the violation is thus atoned for, or that the punishment is effective, but because they do not want to expose the perpetrator, who is often only a child, to the dangers of imprisonment and complete ruin, and because a fine, where it is permissible, affects parents rather than the wrongdoer. As justifiable as this may seem, there is no doubt that simple reprimand does not always effect the desired result, and is not even felt as a mild punishment in cases where youthful wrongdoers are depraved and morally corrupted. In such cases reprimand is often ridiculed, and instead of being a punishment and an incentive to improvement tends to weaken the power of moral resistance.

It is an exaggeration to conclude from the statistics on crime that the youth of the German nation are morally degenerating and that German civilization is on the wane. It is true they disclose evils of national life which the criminal code has proved insufficient to remedy, to the increase of which it has, in fact, contributed. The many causes why juvenile criminality is on the increase during the present generation have been too frequently discussed to require present consideration. Nevertheless it must not be forgotten that it is impossible to prove by the statistics of crime what the result of each of the various causes has been. Not only is the law administered by courts and the police force in different ways, and not only are statistics confined to violations and crimes, omitting mere transgressions (*Uebertretungen*), but also the other fact should be considered that punishable acts committed by minors, such as assault, damage to property, even theft, are by no means in all cases in themselves proofs of degeneracy and moral depravity. On the other hand, a child is frequently morally corrupt before it commits a punishable act, or before any such act is discovered and legally prosecuted.

Girls of the poorer classes living in large cities come under consideration in this respect. According to statistics criminality among girls is much less frequent than among boys. In the year 1896 only 19.8 per cent of the sentences pronounced referred to girls. The different judicial districts, of course, present very great variations. The proportion of female to male juvenile persons sentenced varies from 3.3 per cent in the district of Waldshut to 40.7 per cent in the Duchy of Saxe-Altenburg. In 41 of 90 districts it varies between 20 and 30 per cent. The large cities by no means take the lead. Berlin has a per cent of 26.5 and Hamburg of 22.4. In fact, the districts which contain no large cities (Dresden, with 32.8 per cent, forms an exception) present the highest figures. In this case, too, it would be wrong to draw positive conclusions regarding the degree of depravity of girls in the different judicial districts from the

statistical reports. They give no information on the number of girls employed in industry (factories and shops) who lose their virtue before the close of their eighteenth year, and thus fall into a moral degeneracy from which very few are ever rescued later in life. * * *

The most important consideration in the matter is that liability of children to punishment is made to depend not alone upon the full consciousness of guilt, but also upon a sufficient degree of moral development and maturity to justify responsibility before the law. The task of state prosecutors and judges is thereby made very difficult. It is not, indeed, always an easy matter to determine whether young persons have sufficient maturity of judgment to understand their culpability. However, in most cases, a properly conducted hearing will lead to positive information. There can be no doubt that children of sound mind who have completed the school course understand the culpability of such acts as form by far the largest percentage of the crimes and transgressions of youth, such as theft, fraud, speculation, and assault. But the case is altogether different in determining moral development and maturity. Outward indications by which it could be recognized do not exist. The accused may possess good schooling and fluency of speech, still his moral character may not be developed. The surroundings in which he has grown up, the examples set before him, and his whole previous conduct, must be investigated. The required maturity of moral character does not consist in being able to weigh the motives which impel anyone to commit a deed and the counter motives which impel him to desist. He who is capable of weighing these motives correctly will not commit a punishable act; his good motives will outbalance the evil. This applies to the young as well as to adults. On the other hand, if a wrongdoer is not conscious of resisting motives, they not having existed for him, he does not possess the judgment necessary for understanding his guilt. Moral maturity, which in addition must exist in order to impute culpability, consists rather in the offender being able to judge the significance and consequences which a culpable act and its legal punishment must have on his moral character and whole subsequent career, and in his being by education and training accustomed to resist temptation. As long as moral training is possible for a child, should he be found lacking it, such a child can not be considered legally responsible, because the most effective motive that prevents anyone from committing a culpable act is lacking, or lies dormant in him. In children under 14 years of age precisely this motive is in general dormant and unrecognized; consequently the demand to defer the age for legal prosecution from the completion of the twelfth to that of the fourteenth year is well founded. Of course there are exceptions where even younger children have sufficient development of moral character and still commit culpable acts, because they are not able to resist wrongful impulses in single cases. The law can not take rare exceptions, however, into consideration, because, in the first place, the younger a child is the more difficult it is for a judge to determine whether it can be held legally responsible or not, and because with children under 14 years the harmful consequences which legal prosecution and a sentence of imprisonment entail on their development and future life outbalance the benefit of punishment by law.

To define the criminal responsibility, in the above sense of the term, of children between 14 and 18 years of age, is naturally difficult, but not more difficult than the task before judges in other instances, when they are obliged to investigate the psychological conditions of those whom they are to judge. The objection has been raised that adults deficient in moral and mental development often commit criminal acts for which they are nevertheless held legally accountable. "It seems inconsistent," some people argue, "that proof of sufficient develop-

ment should be required for judging those under 18 and not those over 18 years of age. The claim that everyone over 18 years possesses it does not bring about the degree of development required. It were altogether wrong to create special privileges for juvenile criminals. Every person who has the ability to act and understand the natural consequences of his act should be held legally responsible. This capacity usually develops with the tenth year of age, and so that age should be accepted as the lowest limit for legal prosecution. The law must take into consideration that between the ages of 10 and 16, the usual period of adolescence, a certain sensibility and increased activity of the emotions and intellect exist which should affect the measure of punishment. The law must, therefore, give judges the right to punish children according to their discretion. However, they should not be allowed to exceed the term of two years' imprisonment for crime and six months for transgression. The trial could be made of allowing children to serve the sentence in a reformatory instead of prison."

It is not our purpose to examine these propositions, against which the most serious objections arise. It is evident that the objectors fall into the same error which they attack. Conditions of increased sensibility, the greater activity of the emotions and intellect ascribed to the period of 10 to 16 years and justifying extensive privileges for youth at that age, are frequently found among adults as consequences of natural endowments and influences of the most varied events upon soul and body. In fact, they occur oftener among adults than among children who have completed their tenth year of age but who have not passed the period of puberty. And yet there are those who would justify leniency of judgment with regard to the young and deny it to adults.

When the state refrains from criminal punishment in cases of children and youthful persons deficient in mental and moral development so that they do not recognize the culpability of their acts nor appreciate the consequences of criminal punishment, the reason is that in such cases the purpose of punishment would be thwarted, and the state in pronouncing its sentence would be acting contrary to its highest duty. So long as there is a possibility of developing, by education and training, the moral character and power of resistance required to transform a young and immature person guilty of a violation of law into a useful member of society the state should not make the task more difficult by punishment, but should provide for appropriate training to rescue juvenile wrongdoers from ruin. The age to which this possibility is confined varies greatly with individuals, and can not be determined by a general proposition for all. The criminal code presupposes that persons of sound mind who have completed their eighteenth year are sufficiently developed intellectually to distinguish between a guilty act and one not so, and can consequently recognize their culpability. They are fully responsible before the law. It can hardly be supposed that a person of sound mind, 18 years old, is ever so deficient in judgment as not to understand the culpability of his acts. Even if, as general opinion demands, the criminal code is changed in so far as to preclude from sentence juveniles having this understanding but lacking the necessary development of mind and character for comprehending the moral and social significance of the culpable act and its punishment, this age limit will still be retained. In the majority of cases those who have passed it will possess at least sufficient development of moral character to be held accountable for their actions by the state. However, as most frequently happens, development of moral insight must not be confused with moral force. The measure of moral force possessed by different individuals varies greatly. It forms the vital essence of human character difficult to apprehend. Consequently it is also impossible to give an "abstract standard of moral force" by which that of individuals may be measured. The

state naturally requires a certain degree of moral force—the power to resist criminal impulses. However, all who commit culpable acts lack this measure of moral force, and just because it is wanting in them the state makes them legally responsible and condemns them. Maturity of moral character in the above sense of the term may be acquired and cultivated by education, of course to a variable degree. The comprehension to know that a common transgression of crime is not only culpable, but also morally reprehensible; that it is a violation of law and rebellion against social order which must be upheld; that criminal punishment is not only an outward hardship, but that it also brands the wrongdoer, a fact which may have a momentous effect on his whole life, can be lacking in persons of sound mind and over 18 years old only in rare instances. In the rare cases in which an adult is as undeveloped as a minor without being diseased in mind the state can not withhold punishment, as punishment can no longer be replaced by education. The purpose of punishment, then, is to give the wrongdoer the insight and moral earnestness in which he has been lacking. This deficiency can only influence the kind and extent of punishment to which he must be sentenced.



CHAPTER X.

GRAMMAR AND VOCABULARY OF THE HLINGĪT LANGUAGE OF SOUTHEASTERN ALASKA.

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PREFACE.

The authors are aware that the scientific orthography, in which the vowels have their continental sounds and the consonants their English pronunciation, is now in general use by ethnologists.

But as this grammar is intended for colloquial use only, we have adhered mainly to the Websterian orthoepy and phonetic principles of spelling.

To assist the student in acquiring the pronunciation of difficult sounds we have made use of a few extra diacritical points.

The student should aim at mastery of the Hlingĭt pronunciation.

He must *drill, drill, drill*, until he acquires facility in intonation, enunciation, and pronunciation.

The ear must be accustomed to hear and the tongue to express the native sounds.

Hlingit is a harsh, guttural language, and requires much practice to train the organs of speech to new positions.

The tongue is used *breadth*-wise as well as *length*-wise.

Go slowly from the easy to the hard.

Do not attempt too much at first.

Leave all hard words and forms of expression until a good command of easy words and sentences has been gained.

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I.—ALPHABET—KEY TO PRONUNCIATION.

ALPHABET.

a	h	n	u
c	i	o	w
d	j	q	x
e	k	s	y
g	l	t	z

The letters *b, f, m, p, r,* and *v* are wanting. Only the hard sound of *g* and *c* is used; viz, *go, get, car, cat;* *k* is always guttural.

(For guttural sounds of *g* see opposite page.)

KEY TO PRONUNCIATION.

VOWEL SOUNDS.

English.

ā, as in *ate, mate.*

ä, as in *ark, arm.*

â, as in *senate.*

The mark ^ indicates the obscure sound of vowels.

ē, as in *be, me.*

ĕ, as in *ten, hen.*

ī, as in *dīe, high.*

î, as in *police.*

ȳ, as in *hit, tin.*

ō, as in *old, bone.*

ŏ, as in *on, ox.*

ū, as in *use, tune.*

ŭ, as in *up.*

Hlingĭt.

hā, what; dā, enough.

āt, aunt; āh, yes.

hēn, water; sē'w, rain.

shĕ, blood; tĕ, stone.

yī, whale; tī, garden.

hĭt, house; jĭn, hand.

hā-dō' (an interjection).

ū'dā, over there.

w and *y* have the same powers as in English.

DOUBLE VOWELS.

English.

au=ow in *how.*

ōō as in *too, room.*

ōō as in *took, look.*

Hlingĭt.

an-kau, lord, chief.

gōōn, spring-water.

hōō, him; ha-gōō, come.

ē-ē represents a prolonged sound of long ē. It has no equivalent in English. Hlingĭt example, yē-ē, your. ōō frequently forms the termination of certain guttural sounds, such as the German *ch* and guttural *g*'s. This combination of sounds is indicated thus: *ch^{oo}, g^{oo}, ġ^{oo},* etc. Pronounce the guttural, but hold the lips in position as if to give the ōō sound. Examples: *szāch^{oo}, hat; sĭ-āg^{oo}, bitter.*

CONSONANT COMBINATIONS.

All the consonant sounds and their combinations occurring in Hlingĭt may be divided into four classes, viz: guttural, palatal fortis, dental fortis, and lateral fortis sounds. The true pronunciation of these sounds must be learned from a native, as there are no English equivalents.

Guttural sounds, or sounds made by the root of the tongue and the soft palate, using little breath. There are six kinds of this class, and are marked as follows: *k, k', h, ġ, ġ', q.*

1. *k* as in *kũ-nũsh-gōō-dũ'*, poor.
kũ-hlũ-yũhl', a lie, falsehood.
kũ-tahl, pitcher.

To form this sound the extreme root of the tongue is pressed gently up against the soft palate and the breath released with a decided click or snap. Lips apart.

2. *k̥* as in *kũ*, man.
k̥ōōc, box, trunk.
k̥k̥, copper.

The root of the tongue is pressed hard up against the soft palate and the breath released with a soft, explosive sound. Lips apart.

3. *h* as in *hũ*, yellow cedar.
h̥ē, burden, pack.
ōōh, tooth, teeth.

The diacritic mark *h̥* indicates the rough breathing sound.

This is a good example of the guttural aspirate. The root of the tongue is relaxed a little, barely touching the soft palate, and the breath driven out forcibly, making a sound not unlike a snore.

4. *g* as in *gũn*, look here.
gũnch, tobacco.
gōōch, wolf.

g has not the sound of *j*, but the hard sound, as in *go*.

This is the softest guttural that occurs in Hlingĭt. Contract the tongue until the throat cavity is filled. Expel breath gently.

5. *g̃* as in *gũn*, fire.
g̃ũc, valley.
g̃ē, mouth.

This sound is not unlike the third guttural sound, *h̥*, except that the breath is forced out more slowly, making a harsh, rasping sound.

6. *q* as in *quũn*, inhabitants.
nũ'-qu, cuttle fish, squid.
lũ'-qu, berries, fruit.

This sound is formed much like the second guttural sound *k̥*, except that the lips are held as if to sound *q*.

Palatal fortis sounds, or sounds made by the middle of the tongue being pressed up against the roof of the mouth and the breath forced out between. There are three palatal fortis sounds, marked as follows: *g̃h̥*, *g'h̥*, *ch̥*.

1. *g̃h̥* as in *g̃h̥ũn*, anger.
g̃h̥ũg̃h̥, apple.
g̃h̥ōōg̃h̥, paper, book.
2. *g'h̥* as in *g'h̥ũ*, brother (female speaking).
cēg'h̥, younger brother or sister.
g'h̥ōōnds, potatoes.
3. *ch̥* as in *ch̥ũ'-dōō*, comb.
ch̥ōōn, north wind.
ch̥ũ'-nũ, evening.

ch̥ is equivalent to the German *ch* in *äch*.

ch̥ is equivalent to *ch*, as in *church*.

Dental fortis sounds, or sounds made by the tongue being pressed against the teeth and gums, the breath being released with a sharp, explosive sound. There are four dental fortis sounds, viz: *dt̥*, *dj̥*, *ds̥*, *sz̥*.

1. *dt̥* as in *dt̥ũ*, floor, board.
dt̥ēg̃h̥, ice, hard.
g'h̥ũdt̥, eggs.

2. *dj* as in *djäg'*, eagle.
djä'qu, long ago.
hōōdj, all gone.
3. *dts* as in *dtsä*, fragrance.
g'ōōndts, potatoes.
dtsü-dtsē', bird.
4. *sz* as in *sz'sü*, sail, cloth.
szāk, smoke.
szēc, black bear.

Lateral fortis sounds, or sounds made by the tongue used breadth-wise, and the breath expelled along the sides of the tongue. There are four lateral fortis sounds, as follows: *DL*, *dl*, *hl*, *tl*.

1. *DL* as in *DLäc*, dress.
DLē, blanket.
āDL, salt.
2. *dl* as in *dlōōk*, sore.
dlāk, finger.
dlät'e, land, country.
3. *hl* as in *Hling'it*, person, people.
hlōō, nose.
hlī, don't.
4. *tl* as in *tläg'*, no.
tläg^, one.
ā-tlān, large, much.

II.—NOUNS: NUMBER, GENDER.

NUMBER OF NOUNS.

Nearly all Hiling'it nouns have two number forms, singular and plural, although in some instances the plural form is rarely or never used. The plural of nouns is formed by adding the sound *g^* to the singular.

EXAMPLES.

<i>Singular.</i>	<i>Plural.</i>
<i>cātl</i> , dog.	<i>cātlg^</i> , dogs.
<i>dōōsh</i> , cat.	<i>dōōshg^</i> , cats.
<i>h'īt</i> , house.	<i>h'īt g^</i> , houses.
<i>yäqu</i> , canoe.	<i>yäqug^oo</i> , canoes.
<i>kä</i> , man.	<i>kä g^oo</i> , men.
<i>g^ädt</i> , island.	<i>g^ädtg^</i> , islands.

Names of parts of the body have no plural form.

EXAMPLES.

<i>Singular.</i>	<i>Plural.</i>
<i>shü</i> , head.	<i>shü</i> , heads.
<i>yü</i> , face.	<i>yü</i> , faces.
<i>jin</i> , hand.	<i>jin</i> , hands.
<i>gōōs</i> , foot.	<i>gōōs</i> , feet.

Names of relationship or kinship have no plural form, the pronoun *hūs*, they, being used with the singular form to distinguish the plural.

EXAMPLES.

<i>Singular.</i>	<i>Plural.</i>
īsh, <i>father.</i>	īsh hūs, <i>father they.</i>
tlä, <i>mother.</i>	tlä hūs, <i>mother they.</i>
ät, <i>aunt.</i>	ät hūs, <i>aunt they.</i>
cäc, <i>uncle.</i>	cäc hūs, <i>uncle they.</i>
cēg', <i>younger brother or sister.</i>	cēg' hūs, <i>younger brother or sister they.</i>

IRREGULAR PLURALS.

The plural of some nouns is an entirely different word from the singular.

EXAMPLES.

<i>Singular.</i>	<i>Plural.</i>
yü-dü-g'uät's-g'ōō, <i>boy.</i>	g'i-sä'-nŷ, <i>boys.</i>
shät-g'üts-g'ōō, <i>girl.</i>	shäg'-sä'-nŷ, <i>girls.</i>
shä-wüt', <i>woman.</i>	shä', <i>women.</i>

EXAMPLES OF NOUNS OF MULTITUDE.

änt-kē-nŷ, *multitude or congregation.*
 kōō'-ōō', *community.*
 yü'-tsē'-nät', *mammals.*

Such nouns as *Hlingĭt*, people, 'hät, fish, *kōō-dü'h-ä-yä-nŷ-hü'*, star, etc., may be used in either a singular or plural sense.

GENDER.

Correctly speaking, there is no grammatical gender in the Hlingĭt language. Such nouns as *kü*, man, *cäc*, uncle, and *ēg'*, brother, are, perforce, of the masculine gender; such nouns as *shäwüt*, woman, *ät*, aunt, and *dläg'*, sister, are of the feminine; such nouns as *hit*, house, *yäqu*, canoe, and *gau*, bell, are of the neuter or common gender. The feminine gender of animals is designated by the word *shēch*, meaning female, *gōō-wü-cän*, deer, *shēch gōō-wü-cän*, doe, *cäl*, dog, *shēch cäl*, bitch.

A difference is made in the words "brother" and "sister," according as they are used by a man or by a woman.

1. Male speaking:

hōön'h, *brother (elder).*
 dläg', *sister.*

2. Female speaking:

ēg', *brother.*
 shüt'h, *sister (elder).*

III.—DECLENSION OF NOUNS.

Generally speaking, nouns are inflected in three declensions, distinguished by the ending of the genitive singular, and, in some instances, by the final letter of the stem; except when the final sound is preceded by *ōō* or *ōō*, all nouns ending in guttural, palatal fortis, dental fortis, and lateral fortis sounds; all nouns ending in *ch*, *sh*, *c*, *s*, *n*, and *t*, end in *i* in the genitive singular.

Nouns are declined in seven cases, viz: Nominative, genitive, dative, accusative, vocative,^a ablative,^b and locative.

EXAMPLES OF NOUNS OF THE FIRST DECLENSION.

<i>Singular.</i>		<i>Plural.</i>	
<i>Nom.</i> hīt,	<i>house.</i>	hītḡ,	<i>houses.</i>
<i>Gen.</i> hīt-ī,	<i>of a house.</i>	hītḡ-ī,	<i>of houses.</i>
<i>Dat.</i> hīt-t,	<i>to a house.</i>	hītḡ-īt,	<i>to houses.</i>
<i>Acc.</i> hīt,	<i>house.</i>	hītḡ,	<i>houses.</i>
<i>Voc.</i> ———		—————	
<i>Abl.</i> hīt-ch,	<i>by a house.</i>	hītḡ-īch,	<i>by houses.</i>
<i>Loc.</i> hīt-g,	<i>at or on a house.</i>	hītḡ-īg,	<i>at houses.</i>
 <i>Nom.</i> hēn,		 <i>No plural.</i>	
<i>water.</i>			
<i>Gen.</i> hēn'-ī,	<i>of water.</i>		
<i>Dat.</i> hēn-t,	<i>to water.</i>		
<i>Acc.</i> hēn,	<i>water.</i>		
<i>Voc.</i> ———			
<i>Abl.</i> hēn-ch,	<i>by water.</i>		
<i>Loc.</i> hēn-g,	<i>on or in water.</i>		
 <i>Nom.</i> cātī,		 <i>cātīḡ,</i>	
<i>dog.</i>		<i>dogs.</i>	
<i>Gen.</i> cātī-ī,	<i>of a dog.</i>	cātīḡ-ī,	<i>of dogs.</i>
<i>Dat.</i> cātī-t,	<i>to a dog.</i>	cātīḡ-īt,	<i>to dogs.</i>
<i>Acc.</i> cātī,	<i>dog.</i>	cātīḡ,	<i>dogs.</i>
<i>Voc.</i> chā cātī,	<i>O dog.</i>	chā cātīḡ,	<i>O dogs.</i>
<i>Abl.</i> cātī-ch,	<i>by a dog.</i>	chātīḡ-īch,	<i>by dogs.</i>
<i>Loc.</i> cātī-g,	<i>at a dog.</i>	cātīḡ-īg,	<i>at dogs.</i>
 <i>Nom.</i> ān,		 <i>āng,</i>	
<i>town.</i>		<i>towns.</i>	
<i>Gen.</i> ān-ī,	<i>of town.</i>	āng-ī,	<i>of towns.</i>
<i>Dat.</i> ān-t,	<i>to town.</i>	āng-īt,	<i>to towns.</i>
<i>Acc.</i> ān,	<i>town.</i>	āng,	<i>towns.</i>
<i>Voc.</i> ———		—————	
<i>Abl.</i> ān-ch,	<i>by town.</i>	āng-īch,	<i>by towns.</i>
<i>Loc.</i> ān-g,	<i>at town.</i>	āng-īg,	<i>at towns.</i>
 <i>Nom.</i> ās,		 <i>āsg,</i>	
<i>tree.</i>		<i>trees.</i>	
<i>Gen.</i> ās-ī,	<i>of tree.</i>	āsg-ī,	<i>of trees.</i>
<i>Dat.</i> ās-t,	<i>to tree.</i>	āsg-t,	<i>to trees.</i>
<i>Acc.</i> ās,	<i>tree.</i>	āsg,	<i>trees.</i>
<i>Voc.</i> ———		—————	
<i>Abl.</i> ās-ch,	<i>by tree.</i>	āsg-īch,	<i>by trees.</i>
<i>Loc.</i> ās-g,	<i>at tree.</i>	āsg-īg,	<i>at trees.</i>
 <i>Nom.</i> DLāc,		 <i>DLācg,</i>	
<i>dress.</i>		<i>dresses.</i>	
<i>Gen.</i> DLāc-ī,	<i>of dress.</i>	DLācg-ī,	<i>of dresses.</i>
<i>Dat.</i> DLāc-t,	<i>to dress.</i>	DLācg-t,	<i>to dresses.</i>
<i>Acc.</i> DLāc,	<i>dress.</i>	DLācg,	<i>dresses.</i>
<i>Voc.</i> ———		—————	
<i>Abl.</i> DLāc-ch,	<i>by dress.</i>	DLācg-īch,	<i>by dresses.</i>
<i>Loc.</i> DLāc-g,	<i>at dress.</i>	DLācg-īg,	<i>at dresses.</i>

^a The vocative case is used only in addressing persons or animals and is distinguished by *chā*, O!

^b More properly the instrumental.

The ablative case is often used as the subject of a transitive verb.

EXAMPLES.

Cātl-ch ōō-wū-'hū' = A dog ate it.

by dog (it) ate.

Cātlg'-īch ōō-wū-'hū' = Dogs ate it.

by dogs (it) ate.

Kā-ch ōō-wū-ōōn' = A man shot it.

by man (it) shot.

Shūwūt'-ch wōō'-dtā' = A woman found it.

by woman (it) found.

SECOND DECLENSION.

Except when preceded by *ōō* or *ōō*, the genitive ending of nouns ending in single vowels is *yĭ*.

Singular and plural.

Nom. shă, head or heads.

Gen. shă-yĭ, of head or heads.

Dat. shă-t, to head or heads.

Acc. shă, head or heads.

Voc. ———.

Abl. shă-ch, by head or heads.

Loc. shă-g', at head or heads.

Singular.

Nom. tĭ, garden.

Gen. tĭ-yĭ, of garden.

Dat. tĭ-t, to garden.

Acc. tĭ, garden.

Voc. ———.

Abl. tĭ-ch, by garden.

Loc. tĭ-g', at garden.

Plural.

tĭg', gardens.

tĭg'-yĭ, of gardens.

tĭg'-t, to gardens.

tĭg', gardens.

—————.

tĭg'-īch, by gardens.

tĭg'-g', at gardens.

For no apparent reason the *yĭ* is dropped in the genitive plural of *tĭ*. Such irregularities occur frequently. In many instances, doubtless, these changes are made for the sake of euphony; other changes are due to the natural growth of the language.

Singular and plural.

Nom. ū'hă', paddle or paddles.

Gen. ū'hă'-yĭ, of paddle or paddles.

Dat. ū'hă-t, to paddle or paddles.

Acc. ū'hă, paddle or paddles.

Voc. ———.

Abl. ū'hă-ch, by paddle or paddles.

Loc. ū'hă-g', at paddle or paddles.

Singular.

Nom. dlē, blanket.

Gen. dlē-yĭ, of blanket.

Dat. dlē-t, to blanket.

Acc. dlē, blanket.

Voc. ———.

Abl. dlē-ch, by blanket.

Loc. dlē-g', at blanket.

Plural.

dlēg', blankets.

dlēg'-yĭ, of blankets.

dlēg'-t, to blankets.

dlēg', blankets.

—————.

dlēg'-īch, by blankets.

dlēg'-g', on blankets.

THIRD DECLENSION.

The genitive singular of nouns ending in *ṣṣ*, *ṣṣ*, or *au*; of nouns ending in guttural palatal fortis, dental fortis, and lateral fortis sounds, preceded by *ṣṣ* or *ṣṣ*, is *ṣṣ*

Singular.	Plural.
<i>Nom.</i> <i>nṣṣ</i> , <i>fort.</i>	Plural not used.
<i>Gen.</i> <i>nṣṣ-ṣṣ</i> , <i>of fort.</i>	
<i>Dat.</i> <i>nṣṣ-t</i> , <i>to fort.</i>	
<i>Acc.</i> <i>nṣṣ</i> , <i>fort.</i>	
<i>Voc.</i> ———.	
<i>Abl.</i> <i>nṣṣ-ch</i> , <i>by fort.</i>	
<i>Loc.</i> <i>nṣṣ-gʼ</i> , <i>at fort.</i>	

Singular and plural.

<i>Nom.</i> <i>hlṣṣ</i> ,	<i>nose or noses.</i>
<i>Gen.</i> <i>hlṣṣ-ṣṣ</i> ,	<i>of nose or noses.</i>
<i>Dat.</i> <i>hlṣṣ-t</i> ,	<i>to nose or noses.</i>
<i>Acc.</i> <i>hlṣṣ</i> ,	<i>nose or noses.</i>
<i>Voc.</i> ———.	
<i>Abl.</i> <i>hlṣṣ-ch</i> ,	<i>by nose or noses.</i>
<i>Loc.</i> <i>hlṣṣ-gʼ</i> ,	<i>at nose or noses.</i>
<i>Nom.</i> <i>ḍtaṣṣ</i> ,	<i>feather or feathers.</i>
<i>Gen.</i> <i>ḍtaṣṣ-ṣṣ</i> ,	<i>of feather or feathers.</i>
<i>Dat.</i> <i>ḍtaṣṣ-t</i> ,	<i>to feather or feathers.</i>
<i>Acc.</i> <i>ḍtaṣṣ</i> ,	<i>feather or feathers.</i>
<i>Voc.</i> ———.	
<i>Abl.</i> <i>ḍtaṣṣ-ch</i> ,	<i>by feather or feathers.</i>
<i>Loc.</i> <i>ḍtaṣṣ-gʼ</i> ,	<i>on feather or feathers.</i>
<i>Nom.</i> <i>gʼṣṣgʼ</i> ,	<i>book or books.</i>
<i>Gen.</i> <i>gʼṣṣgʼ-ṣṣ</i> ,	<i>of book or books.</i>
<i>Dat.</i> <i>gʼṣṣgʼ-t</i> ,	<i>to book or books.</i>
<i>Acc.</i> <i>gʼṣṣgʼ</i> ,	<i>book or books.</i>
<i>Voc.</i> ———.	
<i>Abl.</i> <i>gʼṣṣgʼ-ch</i> ,	<i>by book or books.</i>
<i>Loc.</i> <i>gʼṣṣgʼ-gʼ</i> ,	<i>on book or books.</i>
<i>Nom.</i> <i>ṣṣʼh</i> ,	<i>tooth or teeth.</i>
<i>Gen.</i> <i>ṣṣʼh-ṣṣ</i> .	<i>of tooth or teeth.</i>
<i>Dat.</i> <i>ṣṣʼh-t</i> ,	<i>to tooth or teeth.</i>
<i>Acc.</i> <i>ṣṣʼh</i> ,	<i>tooth or teeth.</i>
<i>Voc.</i> ———.	
<i>Abl.</i> <i>ṣṣʼh-ch</i> ,	<i>by tooth or teeth.</i>
<i>Loc.</i> <i>ṣṣʼh-gʼ</i> ,	<i>on tooth or teeth.</i>

IV.—PROPER NOUNS—PRONOUNS.

PROPER NOUNS.

NAMES OF PERSONS.

The Hlingīts have no surnames, the family crest serving for all purposes of identification. Family names are inherited and handed down for generations.

Nearly all names have a meaning, and usually refer to the family crest or totem.

The nominative, dative, ablative, and locative cases of geographical names are in common use, the vocative case being used only on ceremonial occasions.

PRONOUNS.

DECLENSION OF PERSONAL PRONOUNS.

Pronouns are declined more or less like nouns.

The personal pronouns are—

<i>Singular.</i>	<i>Plural.</i>
<i>First person, 'Hūt, I.</i>	ōō-hän', <i>we.</i>
<i>Second person, wā-ě, thou.</i>	yē-whän, <i>you.</i>
<i>Third person, hōō, he or she.</i>	hūs, <i>they.</i>

FIRST PERSON.

<i>Singular.</i>	<i>Plural.</i>
<i>Nom. 'Hūt, I.</i>	ōō-hän', <i>we.</i>
<i>Gen. ũ'h, of me.</i>	hā, <i>of us.</i>
<i>Dat. ũ'h-ēt', to me.</i>	hā-ēt', <i>to us.</i>
<i>Acc. 'hūt, me.</i>	ōōhän, or hā, <i>us.</i>
<i>Voc. ———.</i>	———.
<i>Abl. 'hā-ch, by me.</i>	ōōhän'-ch, <i>by us.</i>
<i>Loc. ũ'h-ēg', in me.</i>	hā-ēg', <i>in us.</i>

SECOND PERSON.

<i>Singular.</i>	<i>Plural.</i>
<i>Nom. wā'-ě', thou.</i>	yē-whän, <i>you.</i>
<i>Gen. ē, of thee.</i>	yē, <i>of you.</i>
<i>Dat. ē-ēt', to thee.</i>	yē-ēt', <i>to you.</i>
<i>Acc. wā-ē', thee.</i>	yē-whän', or ye, <i>you.</i>
<i>Voc. ———.</i>	———.
<i>Abl. wā-ēch', by thee.</i>	yē-whän'-ch, <i>by you.</i>
<i>Loc. ē-ēg', in thee.</i>	yē-ēg', <i>in you.</i>

THIRD PERSON.

<i>Singular.</i>	<i>Plural.</i>
<i>Nom. hōō', he or she.</i>	hūs', <i>they.</i>
<i>Gen. dōō', of him or her.</i>	hūs'-dōō', <i>of them.</i>
<i>Dat. dōō-ēt', to him or her.</i>	hūs'-dōō-ēt', <i>to them.</i>
<i>Acc. hōō', him or her.</i>	hūs', <i>them.</i>
<i>Voc. ———.</i>	———.
<i>Abl. hōō'-ch, by him or her.</i>	hūs'-ch, <i>by them.</i>
<i>Loc. dōō-ēg', in him or her.</i>	hūs'-dōō-ēg', <i>in them.</i>

The pronoun *it* is similarly declined.

Nom. ũ', it. (Uttered with raising inflection.)

Gen. ũ', of it. (Uttered with falling inflection.)

Dat. ũ-ēt', to it.

Acc. ũ', it.

Voc. ———.

Abl. ũ'-ch, by it.

Loc. ũ-ēg', in it.

POSSESSIVE PRONOUNS.

From the genitives of the personal pronouns are formed the possessive pronouns—

ǔ'h, *my* or *mine*.

ê, *thy* or *thine*.

dōō, *his* or *hers*.

ǔ, *its*.

hā, *our* or *ours*.

yē, *your* or *yours*.

hūs-dōō, *their* or *theirs*.

Nouns qualified by a possessive pronoun must be in the genitive case, e. g.:

Dōō hīt'-ī gū-wōōhl-ī'. *The door of his house.*

Ū'h cātł-ī shā-yī'. *My dog's head.*

The possessive pronoun is followed by the genitive, except in words referring to kinship or parts of the body. Examples:

ǔ'h hīt'-ī, *my house*.

ē cātł-ī', *thy dog*.

dōō dōōsh'-ī, *her cat*.

hūs-dōō ū-'hā'-yī, *their paddles*.

EXERCISE.

Translate into Hlingŷt:

Our father. My head.

Your brother (masculine).

Your brother (feminine).

Her book. Its feathers.

The dative and ablative cases of nouns modified by a possessive pronoun prefix the genitive ending ǔ to the case ending thus:

ǔ'h cātł-īch dōō-wū-jūk.

my by dog (ū) was killed.

dōō hīt-īt 'hwā-gōōt.

his to house I went.

Translate into English:

hūs dōō tī-yī.

ǔ'h g'ōōg'-dōō.

ǔ'h īsh hīt-ī.

dōō tlā kōōc-dōō.

ǔ'h cēg' dōōsh-ī.

DEMONSTRATIVE PRONOUNS.

*Singular.**Plural.*

yā or hā, *this*.

yū or wā, *that*.

yā or hā, *these*.

yū or wā, *those*.

Yā refers to objects or persons near by.

Hā refers to objects or persons a little farther away, but has not quite the same value as yū or wā.

EXAMPLES.

yā hītg', *these houses*.

yū kā, *that man*.

wā shāwūt, *that woman*.

hā cātłg', *these dogs*.

yā ū'h yēt, *this my son*.

INDEFINITE PRONOUNS.

- | | |
|-------------------|------------------------|
| 1. All. | 1. Djū'hl-dū-cūt'. |
| 2. Any (objects). | 2. Djū-dä-kōō-ä-sū'. |
| 3. Another. | 3. Djū'-gōō-nū'-ä'. |
| 4. Any (persons). | 4. Djū-ä-dōō-sū'. |
| 5. Few. | 5. Djū-yā'-yū-gōō-äd'. |
| 6. Many. | 6. Shū-yū-dī-hān'. |
| 7. Some. | 7. Ū'-hōō-ä. |
| 8. Each. | 8. Tlūg'-gä. |
| 9. One, or one's. | 9. Kā. |

EXAMPLES.

Kā āt, *one's aunt.*

Djū'hl-dū-cūt yū hītġ', *all those houses.*

Djū-dä-kōō-ä-sū yä dōōshġ, *any of these cats.*

Djū-gōō-nū-ä gu'w-dān, *another horse.*

INTERROGATIVE PRONOUNS.

- Ä-sū, *who.*
 Ä-dōō-sū,^a *whose.*
 Ä-dōō-sū, *whom.*
 Dä-kōō-ä-sū, *which.*
 Dä-sū, *what.*

EXAMPLES.

Who is that? Ä-sū' wā?

What is this? Dä-sū' yā?

Whom do you want? Ä-dōō'-sū' ē-tōō-wä'-sī-gōō?

What do you want? Dä-sū' ē-tōō-wä'-sī-gōō?

Which do you want? Dä-kōō-ä-sū ē-tōō-wä'-sī-gōō?

V.—VERBS.

1. Verbs are rare in the Hlingġt language. Verb phrases are the principal parts of speech and are conjugated as verbs.

2. The ground form from which the verb starts is the third person, singular, but, to avoid confusion, the English form of conjugation is retained.

3. The three persons in each number are distinguished by the *pronominal prefix only*, expressed as a whole or in a modified form.

4. In nearly every verb or verb phrase, the personal pronoun is expressed, partially expressed, or implied. The whole pronoun is rarely used except in the third person plural. In some cases only a sound or syllable of a personal pronoun is present in a verb or verb phrase: As, Yā'-jī-'hū-nē', I work. This phrase is formed by the union of the noun yā-jī-nē, work, and the pronoun 'Hut, I.

It will be noticed that the *t* is dropped in the personal pronoun.

5. When special emphasis is required, the regular form of the personal pronoun is used either at the end or beginning of a verb or verb phrase: As, yān-ē-gōōt', thou walkest; wā-ē yān-ē-gōōt', thou thyself walkest.

^aIn a sentence, the first two syllables of this word precede the noun; the last syllable, sū, follows the noun: As, Ä-dōō yā-gōō' sū-yā? Whose canoe is this?

For the sake of emphasis also the ablative case of nouns and pronouns is sometimes used as subject of a transitive verb: As, *ē-yŭ-tēn'*, thou seest; *wä-äch ē-yŭ-tēn'*, thou thyself seest. Literally, by thee thou seest.

6. When the object of a verb is a personal pronoun, it is prefixed or inserted in the verb phrase, as—

Hŭs-hŭ-sŭ-hŭn. Them I love=I love them.

Hŭs-hŭt-sŭ-hŭn. They me love=They love me.

7. There is no verb *to be*. The nearest approach to it is the verb *yä'-yŭ-tē*—It remains, it abides.

8. *Auxiliaries*.—Words corresponding to the English *will, shall, may, might*, do not exist separately, but are implied in the conjugation of the verb.

9. *Conjugation*.—Hlingŭt verbs seem to have one form of conjugation only.

10. The verbs have voice, mood, tense, number, and person.

11. *Voice*.—The voices are three:

Active, which in transitive verb phrases represents the subject as acting upon some object, as *Gōō-wŭ-căn 'hwä-ōōn'*—I shot a deer.

Middle, which represents the agent as acting upon himself, as *Sh'hwä-dŭ-ōōn'*—I shot myself.

Passive, which represents the subject as acted upon by some other agent, as *Hŭt-wōō-dōō-wŭ-ōōn'*—I was shot.

12. *Moods*.—The moods are six: Indicative (fact), subjunctive (possibility), optative (expressing a wish), imperative (command), infinitive.

13. *Tense*.—The tenses are five: Present, imperfect, future, perfect, and pluperfect.

14. *Number*.—There are two numbers—singular and plural.

15. As in English, verbs are distinguished as transitive and intransitive.

16. *Form*.—By the use of certain particles a verb may be modified into the—

(1.) Progressive form by the use of the particles *yä* and *yän*.

(2.) Interrogative form by the use of the particles *gŭ*, *ŭgŭ*, and *gōōshĕ*.

(3.) Negative form by the use of the particles *hŭhl* and *tlāhl*.

(4.) Emphatic form by the use of the particle *'hă*.

Examples of the four forms:

Cŭ-hŭ-nĕc, I tell.

Yä (progressive particles) *căn-hŭ-nĕc*, I am telling.

Cŭ-hŭ-nĕc gŭ? (interrogative particle), Do I tell?

Tlāhl (negative particle) *cōō-hŭ-nĕc*, I do not tell.

Cŭ-hŭ-nĕc 'hă (emphatic particles), I do tell.

Present indicative.

Present infinitive.

try,	cŭ-hŭ-äqu,	cŭ-hŭ-äqu-ōō'.
work,	yä'-jŭ'-hŭ-nĕ',	yä'-jŭ'-hŭ-nä-yŭ'.
build,	'hŭ-hlŭ-yä'h',	'hŭ-hlŭ-yä'h-y'.
love,	'hŭ-sŭ-hŭn',	'hŭ-sŭ-hŭn-y'.
hunt,	ŭ-hŭ-dlōōn',	ŭ-hŭ-dlōōn-y'.
kill,	'hŭ-jŭk-h,	'hŭ-jŭk-hŭ'.
tell,	cŭ-hŭ-nĕc',	cŭ-hŭ-nĕc-y'.
come,	yän-hŭ-gōōt',	yän-hŭ-gōōt-y'.
sell,	'hŭ-hōōn',	'hŭ-hōōn-y'.
buy,	'hŭ-ōō',	'hŭ-ōō-wōō.
laugh,	ŭt-hŭ-shōōk,	ŭt-hŭ-shōōk-ōō'.
cry,	'hŭ-gă'h',	'hŭ-gă'h-y'.
sing,	ŭt-hŭ-shŭ',	ŭt-hŭ-shĕ-yŭ'.
preach,	sh'cŭ-hŭhl-nĕc,	sh'cŭ-hŭhl-nĕc-y'.
go,	yän-hŭ-gōōt',	yän-hŭ-gōōt-y'.

*Perfect indicative.**Perfect infinitive.*

try,	cōō-'hwā-āqu,	cōō-'hwā-āqu-ōō'.
work,	yā'-jī-'hwā-nā,	yā'-jī-'hwā-nā-yī'.
build,	'hwā-hlŭ-yē'h',	'hwā-hlŭ-yē'h-y'.
love,	'hwā-sī-'hŭn',	'hwā-sŭ-'hŭn'-ŷ.
hunt,	'hwā-dlōōn,	'hwā-dlōōn-y'.
kill,	hwā-jūk',	'hwā-jāk-y'.
tell,	cŭ-'hwā-nēc,	cŭ-'hwā-nēc-y'.
come,	hāt-'hwā-gōōt',	hāt-'hwā-gōōt-y'.
sell,	'hwā-hōōn,	'hwā-hōōn-y'.
buy,	hwā-ōō,	'hwā-ōō-wōō'.
laugh,	ūt-'hwā-shōōk',	ūt-'hwā-shōōk-ōō'.
cry,	'hwā-gā'h,	'hwā-gā'h-y'.
sing,	ūt-'hwā-shē,	ūt-'hwā-shē-y'.
preach,	sh'cŭ-'hw-dlŷ-nēc,	sh'cŭ-'hwahl-nēc-y'.
go,	'hwā-gōōt,	'hwā-gōōt-y'.

It must be remembered that no hard and fast rules can be laid down for the conjugation of any of these verb phrases. Slight variations in the pronominal prefixes occur without any apparent reason. The syllable representing the pronoun in the present indicative and the present infinitive is 'hŭ, a contraction of the pronoun 'hŭt, I or me; in the perfect indicative and the perfect infinitive, the syllable is 'hwā or 'hwā, another change of the same pronoun 'hŭt, made evidently for the sake of euphony.

VI.—CONJUGATION OF THE VERB "TO SEE."

[Derivation: *kōō-tēn'-i*, sight.]

ACTIVE VOICE.

INDICATIVE MOOD.

Present.

*Singular.**Plural.*

'Hā-tēn', *I see.*

E-yŭ-tēn', *thou seest.*

Ŭ-yŭ-tēn', *he sees.*

Tōō-wŭ-tēn', *we see.*

Yē-tēn', *you see.*

Hŭs-ŭ-yŭ-tēn', *they see.*

Imperfect.

Hā-tēn-ŷn', *I was seeing.*

E-tēn-ŷn', *thou wast seeing.*

Ŭ-tēn-ŷn', *he was seeing.*

Tōō-tēn-ŷn', *we were seeing.*

Yē-tēn-ŷn', *you were seeing.*

Hŭs-ŭ-tēn-ŷn', *they were seeing.*

Future.

Yāc-quā-sŭ-tēn', *I shall see.*

Yāc-gŭ-sŭ-tēn', *thou shalt see.*

Yā-ŭ-gōō'h-sŭ-tēn', *he shall see.*

Yā-gŭ'h-tōō-sŭ-tēn', *we shall see.*

Yā-gŭ'h-yē-sŭ-tēn', *you shall see.*

Yā-hŭs-ŭ-gōō'h-sŭ-tēn', *they shall see.*

Perfect.

'Hwā-sī-tēn, *I saw.*

Yē-sī-tēn, *thou sawest.*

Ŭ-w-sī-tēn, *he saw.*

Wōō'-tōō'-sī'-tēn', *we saw.*

Yē-sī-tēn, *you saw.*

Hŭs-ŭ-w-sī-tēn, *they saw.*

Pluperfect.

'Hwá-sǔ-tên-ín', *I had seen.*
 Yē-sǔ-tên-ín', *thou hadst seen.*
 Ū-wōos-tên-ín', *he had seen.*

Wōo-tōō-sǔ-tên-ín', *we had seen.*
 Yē-sǔ-tên-ín', *you had seen.*
 Hūs-ŭ-wōos-tên-ín', *they had seen.*

SUBJUNCTIVE MOOD.

Future.

Kǔ-sǔ-tǐn'-nǐ, *if I see.*
 Ġī-sǔ-tǐn'-nǐ, *if thou seest.*
 Ū'h-sǔ-tǐn'-nǐ, *if he see.*

Kǔ-tōō-sǔ-tǐn'-nǐ, *if we see.*
 Ġǔ-yē-sǔ-tǐn'-nǐ, *if you see.*
 Hūs-ŭ'h-sǔ-tǐn'-nǐ, *if they see.*

IMPERATIVE MOOD.

Ġūs'-tēn', *see thou.*

| Ġǔ'-yē'-sǔ'-tēn', *see ye.*

INFINITIVE MOOD.

Present.

Hǔ-tēn'-ŷ', (*me*) *to see.*
 E-tēn'-ŷ'.
 Ū-tēn'-ŷ'.

| Tōō-tēn'-ŷ', (*us*) *to see.*
 Yē-tēn'-ŷ'.
 Hūs-ŭ-tēn'-ŷ'.

Perfect.

'Hwá-sǔ-tēn'-ŷ', (*me*) *to have seen.*
 Yī-sǔ-tēn'-ŷ'.
 Ū-wōos-tēn'-ŷ'.

| Wōo-tōō-sǔ-tēn'-ŷ', (*us*) *to have seen.*
 Yē-sǔ-tēn'-ŷ'.
 Hūs-ŭ-wōos-tēn'-ŷ'.

Future.

Yāc-quá-sǔ-tēn'-ŷ', (*me*) *to be about to see.*
 Yāc-ġī-sǔ-tēn'-ŷ'.
 Yā-ŭ-gōō'h-sǔ-tēn'-ŷ'.

| Yā-ġǔ'h-tōō-sǔ-tēn'-ŷ', (*us*) *to be about to see.*
 Yā-ġǔ'h-yē-sǔ-tēn'-ŷ'.
 Yā-hūs-ŭ-gōō'h-sǔ-tēn'-ŷ'.

PARTICIPLES.

Present.

'Hǔ-tēn'-ŷ', (*I*) *seeing.*
 E-yǔ-tēn'-ŷ'.
 Ū-yǔ-tēn'-ŷ'.

| Tōō-wǔ-tēn'-ŷ', (*we*) *seeing.*
 Yē-tēn'-ŷ'.
 Hūs-ŭ-yǔ-tēn'-ŷ'.

Future.

Yāc-quá-sǔ'tǐn', (*me*) *about to see.*
 Yāc-ġī-sǔ'tǐn', (*thee*) *about to see.*
 Yā-ŭ-gōō'h-sǔ'tǐn', (*him*) *about to see.*

| Yā-ġǔ'h'-tōō-sǔ'tǐn', (*us*) *about to see.*
 Yā-ġǔ'h-yē-sǔ'tǐn', (*you*) *about to see.*
 Yā-hūs-ŭ-gōō'h-sǔ'tǐn', (*them*) *about to see.*

Perfect.

'Hwá-sǔ-tēn'-ŷ, (*I*) *having seen.*
 Yī-sǔ-tēn'-ŷ, (*thou*) *having seen.*
 Ū-wōos-tēn'-ŷ, (*he*) *having seen.*

| Wōo'-tōō'-sǔ'-tēn'-ŷ', (*we*) *having seen.*
 Yē-sǔ'-tēn'-ŷ', (*you*) *having seen.*
 Hūs-ŭ-wōos-tēn'-ŷ', (*they*) *having seen.*

OPTATIVE MOOD.

Present and future.

Kǎ'-kǔ'-sǔ'-tēn', *let me see.*
 Ū'-ġǔ'h'-sǔ'-tēn', *let him see.*

| Ġǎ'h-tōō-sǔ'-tēn', *let us see.*
 Hūs-ŭ-ġǎ'h-sǔ'-tēn', *let them see.*

POTENTIAL MOOD.

Future.

Quā'-kū'-sī'-tēn', *I might see.*
 Gā'-gī'-sī'-tēn'.
 Ū'-guā'h-sī'-tēn'.

Gā'h-tōō'-sī'-tēn', *we might see.*
 Gā'h-yē-sī'-tēn'.
 Hūs-ū'-guā'h-sī'-tēng'.

Pluperfect.

Quā'-kū'-sū-tēn'-īn', *I might have seen.*
 Gā'-gī'-sū-tēn'-īn'.
 Ū'-guā'h-sū-tēn'-īn'.

Gā'h-tōō'-sū-tēn'-īn', *we might have seen.*
 Gā'h-yē-sū-tēn'-īn'.
 Hūs-ū'-guā'h-sū-tēn'-īn'.

PASSIVE VOICE.

INDICATIVE MOOD.

Present.

'Hūt-dōō-wū-tēn', *I am seen.*
 E-dōō-wū-tēn'.
 Dōō-wū-tēn'.

Hā-dōō-wū-tēn', *we are seen.*
 Yē-dōō-wū-tēn'.
 Hūs-dōō-wū-tēn'.

Imperfect.

'Hūt-dōō-tēn'-īn', *I was seen.*
 E-dōō-tēn'-īn'.
 Dōō-tēn'-īn'.

Hā-dōō-tēn'-īn', *we were seen.*
 Yē-dōō-tēn'-īn'.
 Hūs-dōō-tēn'-īn'.

Future.

Yā-'hūt-gū'h-dōōs-tēn', *I shall be seen.*
 Yā-ē-gū'h-dōōs-tēn'.
 Yā-gū'h-dōōs-tēn'.

Yā-hā-gū'h-dōōs-tēn', *we shall be seen.*
 Yā-yē-gū'h-dōōs-tēn'.
 Yā-hūs-gū'h-dōōs-tēn'.

Perfect.

'Hūt'-wōō'-dōō'-dsī'-tēn', *I was seen.*
 E-wōō'-dōō'-dsī'-tēn'.
 Wōō'-dōō'-dsī'-tēn'.

Hā-wōō'-dōō'-dsī'-tēn', *we were seen.*
 Yē-wōō'-dōō'-dsī'-tēn'.
 Hūs-wōō'-dōō'-dsī'-tēn'.

Pluperfect.

'Hūt-wōō-dōōs-tēn'-īn', *I had been seen.*
 E-wōō-dōōs-tēn'-īn'.
 Wōō-dōōs-tēn'-īn'.

'Hā-wōō-dōōs-tēn'-īn', *we had been seen.*
 Yē-wōō-dōōs-tēn'-īn'.
 Hūs-wōō-dōōs-tēn'-īn'.

SUBJUNCTIVE MOOD.

Future.

'Hūt-gū-dōōs-tīn'-ī, *if I am seen.*
 E-gū-dōōs-tīn'-ī.
 Gū-dōōs-tīn'-ī.

Hā-gū-dōōs-tīn'-ī, *if we are seen.*
 Yē-gū-dōōs-tīn'-ī.
 Hūs-gū-dōōs-tīn'-ī.

INFINITIVE MOOD.

Present.

'Hūt-dōō-tēn'-ī, *(me) to be seen.*
 E-dōō-tēn'-ī.
 Dōō-tēn'-ī.

Hā-dōō-tēn'-ī, *(us) to be seen.*
 Yē-dōō-tēn'-ī.
 Hūs-dōō-tēn'-ī.

Future.

Yā-'hüt-gü'h-dōos-tēn-ī, (<i>me</i>) to be about to be seen.	Yā-hä-gü'h-dōos-tēn-ī.
Yā-ē-gü'h-dōos-tēn-ī.	Yā-yē-gü'h-dōos-tēn-ī.
Yā-gü'h-dōos-tēn-ī.	Yā-hüs-gü'h-dōos-tēn-ī.

Perfect.

'Hüt-wōō-dōos-tēn-ī', (<i>me</i>) to have been seen.	Hä-wōō-dōos-tēn-ī', (<i>us</i>) to have been seen.
E-wōō-dōos-tēn-ī', (<i>thee</i>) to have been seen.	Yē-wōō-dōos-tēn-ī', (<i>you</i>) to have been seen.
Wōō-dōos-tēn-ī', (<i>him</i>) to have been seen.	Hüs-wōō-dōos-tēn-ī', (<i>them</i>) to have been seen.

PARTICIPLES.

Present.

'Hüt-dōō-wü'-tīn'-ī', (<i>I am</i>) being seen.	Hä-dōō-wü'-tīn'-ī', (<i>we are</i>) being seen.
E-dōō-wü'-tīn'-ī', (<i>thou art</i>) being seen.	Yē-dōō-wü'-tīn'-ī', (<i>you are</i>) being seen.
Dōō-wü'-tīn'-ī', (<i>he is</i>) being seen.	Hüs-dōō-wü'-tīn'-ī', (<i>they are</i>) being seen.

Future.

Yā-'hüt-gü'h-dōos'-tīn', about to be seen.	Yā-hä-gü'h'-dōos'-tīn'.
Yā'-ē-gü'h'-dōos'-tīn'.	Yā-yē-gü'h'-tīn'.
Yā'-gü'h-dōos'-tīn'.	Yā-hüs-gü'h'-dōos'-tīn'.

Perfect.

'Hüt-wōō'-dōō'-dsī'-tēn'-ī', having been seen.	Hä'-wōō'-dōō'-dsī'-tēn'-ī'.
E-wōō'-dōō'-dsī'-tēn'-ī'.	Yē'-wōō'-dōō'-dsī'-tēn'-ī'.
Wōō'-dōō'-dsī'-tēn'-ī'.	Hüs'-wōō'-dōō'-dsī'-tēn'-ī'.

OPTATIVE MOOD.

Present and future.

'Hüt-gä'h'-dōos'-tēn', let me be seen.	Hä-gä'h'-dōos'-tēn', let us be seen.
E-gä'h'-dōos'-tēn', let yourself be seen.	Yē-gä'h'-dōos'-tēn', let yourselves be seen.
Gä'h'-dōos'-tēn', let him be seen.	Hüs-gä'h'-dōos'-tēn', let them be seen.

POTENTIAL MOOD.

Future.

'Hüt-gä'h'-dōō'-dsī'-tēn', <i>I might be seen.</i>	Hä-gä'h'-dōō'-dsī'-tēn', <i>we might be seen.</i>
E-gä'h'-dōō'-dsī'-tēn'.	Yē-gä'h'-dōō'-dsī'-tēn'.
Gä'h'-dōō'-dsī'-tēn'.	Hüs-gä'h'-dōō'-dsī'-tēn'.

Pluperfect.

'Hüt-gä'h'-dōos'-tēn'-īn', <i>I might have been seen.</i>	Hä-gä'h'-dōos'-tēn'-īn', <i>we might have been seen.</i>
E-gä'h'-dōos'-tēn'-īn'.	Yē-gä'h'-dōos'-tēn'-īn'.
Gäh-dōos'-tēn'-īn'.	Hüs-gä'h'-dōos'-tēn'-īn'.

EXAMPLES FOR PRACTICE.

Dă'h yă-qu 'há-tên'.	I see two canoes.
Yĩ-sĩ-tên gĩ'?	Did you see him?
Hũs-doo-tōō-wă'-sĩ-gōō'hũs-ē-woōs-tên-Ÿ'.	They want to see you.
Ů'h-tōō-wă'-sĩ-gōō' 'hwă-sũ-tên-Ÿ'.	I want to see him.
Tlăhl'hwă-tên.	I do not see it.
Tlăhl woō-tōō-sũ-tên.	We did not see him.
Gōō-kũ-gōōt kă-kũ sũ-tên-Ÿ'.	I will go to see him.

VII.—CONJUGATION OF THE VERBS “TO WORK,” “TO TELL,” AND “TO HAVE.”

TO WORK.

INDICATIVE MOOD.

Present.

<i>Singular.</i>	<i>Plural.</i>
Yă'-jĩ-'hũ-ně, <i>I work.</i>	Yă'-jĩ-tōō-ně', <i>we work.</i>
Yă'-jē-ně', <i>thou workest.</i>	Yă'-jĩ-yē-ně', <i>you work.</i>
Yă'-jĩ-ně', <i>he works.</i>	Yă'-hũs-jĩ-ně', <i>they work.</i>

Future.

Yă'-jĩc-quă-nă', <i>I shall work.</i>	Yă'-jĩ-cũ'h-tōō-nă', <i>we shall work.</i>
Yă'-jĩc-gē-nă', <i>thou shalt work.</i>	Yă'-jĩ-cũ'h-yē-nă', <i>you shall work.</i>
Yă'-jĩc-ğuă-nă', <i>he shall work.</i>	Yă'-hũs-jĩc-ğuă-nă', <i>they shall work.</i>

Perfect.

Yă'-jĩ-'hwă-nă, <i>I worked.</i>	Yă'-jĩ'w-tōō-wũ-nă, <i>we worked.</i>
Yă'-jē-yũ-nă, <i>thou workedest.</i>	Yă'-jĩ-yē-nă, <i>you worked.</i>
Yă'-jē-wũ-nă, <i>he worked.</i>	Yă'-hũs-jē-wũ-nă, <i>they worked.</i>

Pluperfect.

Yă'-jĩ-'hũ-nă'-yĩn, <i>I had worked.</i>	Yă'-jĩ-tōō-nă'-yĩn, <i>we had worked.</i>
Yă'-jē-nă'-yĩn, <i>thou hadst worked.</i>	Yă'-jĩ-yē-nă'-yĩn, <i>you had worked.</i>
Yă'-jĩ-nă'-yĩn, <i>he had worked.</i>	Yă'-hũs-jĩ-nă'-yĩn, <i>they had worked.</i>

SUBJUNCTIVE MOOD.

Present.

Yă'-jĩn-'hũ-nă-nĩ', <i>if I work.</i>	Yă'-jĩn-tōō-nă-nĩ', <i>if we work.</i>
Yă'-jē-nē-nă-nĩ', <i>if thou workest.</i>	Yă'-jĩn-Ÿ-nă-nĩ', <i>if you work.</i>
Yă'-jĩ-nũ-nă-nĩ', <i>if he work.</i>	Yă'-hũs-jĩ-nũ-nă-nĩ', <i>if they work.</i>

IMPERATIVE MOOD.

Yă'-jĩ-nũ-ně', <i>work thou.</i>	Yă'-jĩ-nĩ-ně', <i>work ye.</i>
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INFINITIVE MOOD.

Present.

Yā'-jī-'hū-nā-yī', (*me*) to work.
 Yā'-jē-nā-yī', (*thee*) to work.
 Yā'-jī-nā-yī', (*him*) to work.

Yā'-jī-tōō-nā-yī', (*us*) to work.
 Yā'-jē-nā-yī', (*you*) to work.
 Yā'-hūs-jī-nā-yī', (*them*) to work.

Future.

Yā'-jīc-quā-nā-yī', (*me*) to be about to work.
 Yā'-jīc-gū-nā-yī', (*thee*) to be about to work.
 Yā'-jīc-guā-nā-yī', (*him*) to be about to work.

Yā'-jī-cū'h-tōō-nā-yī', (*us*) to be about to work.
 Yā'-jī-cū'h-yē-nā-yī', (*you*) to be about to work.
 Yā'-hūs-jīc-guā-nā-yī', (*them*) to be about to work.

Perfect.

Yā'-jī-'hwā-nā-yī', (*me*) to have worked.
 Yā'-jī-yī-nā-yī', (*thee*) to have worked.
 Yā'-jī-wōō-nā-yī', (*him*) to have worked.

Yā'-jī'w-tōō-nā-yī', (*us*) to have worked.
 Yā'-jī-yē-nā-yī', (*you*) to have worked.
 Yā'-hūs-jī-wōō-nā-yī', (*them*) to have worked.

PARTICIPLES.

Present.

Yā'-jī-'hū-ně, (*I am*) working.
 Yā'-jē-ně, (*thou art*) working.
 Yā'-jī-ně, (*he is*) working.

Yā'-jī-tōō-ně, (*we are*) working.
 Yā'-jē-ně, (*you are*) working.
 Yā'-hūs-jī-ně, (*they are*) working.

Future.

Yā'-jīc-quā-ně, (*me*) about to be working.
 Yā'-jīc-gě-ně, (*thee*) about to be working.
 Yā'-jīc-guā-ně, (*him*) about to be working.

Yā'-jī-cū'h-tōō-ně, (*us*) about to be working.
 Yā'-jī-cū'h-yī-ně, (*you*) about to be working.
 Yā'-hūs-jīc-guā-ně, (*them*) about to be working.

Perfect.

Yā'-jī-'hwā-nā-yī, (*I*) having worked.
 Yā'-jē-yū-nā-yī, (*thou*) having worked.
 Yā'-jē-wū-nā-yī, (*he*) having worked.

Yā'-jī'w-tōō-wū-nā-yī, (*we*) having worked.
 Yā'-jī-yē-nā-yī, (*you*) having worked.
 Yā'-hūs-jē-wū-nā-yī, (*they*) having worked.

OPTATIVE MOOD.

Yā'-jīn-kū-nā, *let me* work.
 Yā'-jīn-gū-nā, *let him* work.

Yā'-jī-nū'h-tōō-nā, *let us* work.
 Yā'-hūs-jīn-gū-nā, *let them* work.

POTENTIAL MOOD.

Future.

Yā'-jīn-quā-nā, *I might* work.
 Yā'-jīn-gē-yū-nā, *thou mightst* work.
 Yā'-jīn-guā-nā, *he might* work.

Yā'-jī-nū'h-tōō-wū-nā, *we might* work.
 Yā'-jī-nū'h-ye-nā, *you might* work.
 Yā'-hūs-jīn-guā-nā, *they might* work.

Pluperfect.

Yă'-jĭn-quâ-nâ-yĭn', <i>I might have worked.</i>	Yă'-jĭ-nŭ'h-tōō-nâ-yĭn', <i>we might have worked.</i>
Yă'-jĭn-gē-nâ-yĭn', <i>thou mightst have worked.</i>	Yă'-jĭ-nŭ'h-yĭ-nâ-yĭn', <i>you might have worked.</i>
Yă'-jĭn-gŭâ-nâ-yĭn', <i>he might have worked.</i>	Yă'-hŭs-jĭn-guâ-nâ-yĭn', <i>they might have worked.</i>

EXAMPLES FOR PRACTICE.

Yē-dŭt yă'-jĭc-quâ-nâ'.	<i>To-day I will work. I will work to-day.</i>
Dōō-jē-yĭs' yă'-jĭ-'hŭ-ně'.	<i>For him I work. I work for him.</i>
Dicĭ An-kau jē-yĭs yă'-jĭ-nĭ-ně'. (Plural.)	<i>Above Lord for him you work. Work for God.</i>
Dicĭ An-kau jē-yĭs' yă'-jĭ-nŭ-ně'. (Singular).	<i>Above Lord for him work thou. Work for God.</i>
Skagway-g' yă'-jĭn-quâ-nâ	<i>At Skagway I might work. I might work at Skagway.</i>
Ti-gāg' yă'-jē-wŭ-nâ.	<i>In the garden he worked. He worked in the garden.</i>

TO TELL.

INDICATIVE MOOD.

Present.

<i>Singular.</i>	<i>Plural.</i>
Cŭ-'hŭ-nēc', <i>I tell.</i>	Cŭ-tōō-nēc', <i>we tell.</i>
Cē-nēc', <i>thou tellest.</i>	Cŭ-yē-nēc', <i>you tell.</i>
Ŭ-cŭ-nēc', <i>he tells.</i>	Hŭs ŭ-cŭ-nēc', <i>they tell.</i>

Future.

Cōō-kŭ-nēc', <i>I shall tell.</i>	Cŭ'h-tōō-nēc', <i>we shall tell.</i>
Cŭ-gē-nēc', <i>thou shalt tell.</i>	Cŭ'h-yē-nēc', <i>you shall tell.</i>
Ŭc-guâ-nēc', <i>he shall tell.</i>	Hŭs-ŭc-guâ-nēc', <i>they shall tell.</i>

Perfect.

Cŭ-'hwä'-nēc', <i>I told.</i>	Cŭ'w'-tōō'-wŭ'-nēc', <i>we told.</i>
Cē'-yŭ'-nēc', <i>thou didst tell.</i>	Cŭ-yē-nēc', <i>you told.</i>
Ŭ'-cŭ'-wŭ'-nēc', <i>he told.</i>	Hŭs-ŭ-cŭ-wŭ'-nēc', <i>they told.</i>

Pluperfect.

Cŭ-'hŭ-nēc-ĭn', <i>I had told.</i>	Cŭ-tōō-nēc-ĭn', <i>we had told.</i>
Cē-nēc-ĭn', <i>thou hadst told.</i>	Cŭ-yē-nēc-ĭn', <i>you had told.</i>
Ŭ-cŭ-nēc-ĭn', <i>he had told.</i>	Hŭs-ŭ-cŭ-nēc-ĭn', <i>they had told.</i>

SUBJUNCTIVE MOOD.

Future.

Cŭn-'hŭ-nĭc'-nĭ, <i>if I tell.</i>	Cŭn-tōō-nĭc'-nĭ, <i>if we tell.</i>
Cŭ-nē-nĭc'-nĭ, <i>if thou tellest.</i>	Cŭ-nŭ-yē-nĭc'-nĭ, <i>if you tell.</i>
Ŭ-cŭ-nŭ-nĭc'-nĭ, <i>if he tell.</i>	Hŭs-ŭ-cŭ-nŭ-nĭc'-nĭ, <i>if they tell.</i>

NOTE.—Remember *c* has the sound of *k*.

IMPERATIVE MOOD.

Present.

Cǔ'-nǔ'-nēc', *tell thou.*| Cǔ'-nǔ'-yē'-nēc', *tell ye.*

INFINITIVE MOOD.

Present.

Cǔ-'hǔ-nēc-ĭ', (*me*) *to tell.*Cē-nēc-ĭ', (*thee*) *to tell.*Ů-cǔ-nēc-ĭ', (*him*) *to tell.*| Cǔ-tōō-nēc-ĭ', (*us*) *to tell.*| Cǔ-yē-nēc-ĭ', (*you*) *to tell.*| Hūs-ŭ-cǔ-nēc-ĭ', (*them*) *to tell.*

Future.

Cōō-kǔ-nēc-ĭ', (*me*) *about to tell.*Cǔ-ġē-nēc-ĭ'. (*thee*) *about to tell.*Ů-ġuá-nēc-ĭ', (*him*) *about to tell.*| Cǔ'h-tōō-nēc-ĭ', (*us*) *about to tell.*| Cǔ'h-yē-nēc-ĭ', (*you*) *about to tell.*| Hūs-ŭ-ġuá-nēc-ĭ', (*them*) *about to tell.*

Perfect.

Cǔ-'hwá-nēc-ĭ', (*me*) *to have told.*Cǔ-yĭ-nēc-ĭ', (*thee*) *to have told.*Ů-cǔ-wōō-nēc-ĭ', (*him*) *to have told.*| Cǔ'w-tōō-nēc-ĭ', (*us*) *to have told.*| Cǔ-yē-nēc-ĭ', (*you*) *to have told.*| Hūs-ŭ-cǔ-wōō-nēc-ĭ', (*them*) *to have told.*

PARTICIPLES.

Present.

Cǔ'-hǔ-nĭc', (*I am*) *telling.*Cē'-nĭc', (*thou art*) *telling.*Ů'-cǔ-nĭc', (*he is*) *telling.*| Cǔ-tōō-nĭc', (*we are*) *telling.*| Cǔ-yē-nĭc', (*you are*) *telling.*| Hūs-ŭ-cǔ-nĭc' (*they are*) *telling.*

Future.

Cōō-kǔ'-nĭc', (*I am*) *about to be telling.*Cǔ'-ġē'-nĭc', (*thou art*) *about to be telling.*Ůc'-ġuá'-nĭc', (*he is*) *about to be telling.*| Cǔ'h'-tōō'-nĭc', (*we are*) *about to be telling.*| Cǔ'h'-yē'-nĭc', (*you are*) *about to be telling.*| Hūs'-ŭc'-ġuá'-nĭc', (*they are*) *about to be telling.*

Perfect.

Cǔ'-hwá'-nēc'-ĭ', (*I*) *having told.*Cǔ'-yŭ'-nēc'-ĭ', (*thou*) *having told.*Ů-cǔ-wŭ-nēc'-ĭ', (*he*) *having told.*| Cǔ'w'-tōō'-wŭ'-nēc'-ĭ', (*we*) *having told.*| Cǔ'-yē'-nēc'-ĭ', (*you*) *having told.*| Hūs'-ŭ-cǔ-wŭ'-nēc'-ĭ', (*they*) *having told.*

OPTATIVE MOOD.

Present and future.

Cǔn'-kǔ'-nēc', *let me tell.*Ů'-cǔn'-ġŭ'-nēc', *let him tell.*| Cǔ'-nǔ'h'-tōō'-nēc', *let us tell.*| Hūs'-ŭ'-cǔn'-ġŭ'-nēc', *let them tell.*

POTENTIAL MOOD.

Future.

Cǔn'-ġuá-nēc, *I might tell.*Cǔn'-ġē-yŭ-nēc, *thou mightst tell.*Ů-cōōn'-ġuá-nēc, *he might tell.*| Cǔ-nǔ'h-tōō-wŭ-nēc, *we might tell.*| Cǔ-nǔ'h-yē-nēc, *you might tell.*| Hūs-ŭ-cōōn'-ġuá-nēc, *they might tell.*

Pluperfect.

Cōon-kǔ-nēc-ĭn', *I might have told.*
 Cǔn-gē-nēc-ĭn', *thou mightst have told.*
 Ũ-cōon-gǔ-nēc-ĭn', *he might have told.*

Cǔ-nǔ'h-tōō-nēc-ĭn', *we might have told.*
 Cǔ-nǔ'h-yē-nēc-ĭn', *you might have told.*
 Hūs-ŭ-cōon-gǔ-nēc-ĭn', *they might have told.*

EXAMPLES FOR PRACTICE.

Dōō-ēn-cǔ-nǔ-nēc.
 Ũ'h-ēn ũ-cǔ-wǔ-nēc.
 Hūs-dōō-ēn-ŭgĭ'-ce-nēc?
 E-ēn ŭc-ġuá-nēc'. (Singular.)
 Yē-ēn cōon-kǔ-nēc-ĭn'. (Plural.)

Yē-ēn cǔn-kǔ-nēc. (Plural.)
 E-sǔ-yĭ' 'hǎn cǔ-nǔ-nēc.

'Hǎn cē-yǔ-nēc.

With him tell thou. Tell him.
With me he told. He told me.
With them (?) thou tellest. Do you tell them?
With you he will tell. He will tell you.
With you I would have told. I would have told you.
With you let me tell. Let me tell you.
Your name to me tell thou. Tell me your name.
To me thou didst tell. You told me.

TO HAVE.

INDICATIVE MOOD.

Present.

Singular.

Ũ'h-jē-wōō', *I have.*
 E-jē.wōō', *thou hast.*
 Dōō-jē-wōō', *he has.*

Plural.

Hǎ-jē-wōō', *we have.*
 Yē-jē-wōō', *you have.*
 Hūs-dōō-jē-wōō', *they have.*

Future.

Ũ'h-jē-yā'-ġuá-tē', *I shall have.*
 E-jē-yā'-ġuá-tē', *thou wilt have.*
 Dōō-jē-yā'-ġuá-tē', *he shall have.*

Hǎ-jē-yā'-ġuá-tē', *we shall have.*
 Yē-jē-yā'-ġuá-tē', *you will have.*
 Hūs-dōō-jē-yā'-ġuá-tē', *they shall have.*

Perfect.

Ũ'h-jē-yā'-wōō-tē, *I had.*
 E-jē-yā'-wōō-tē, *thou hadst.*
 Dōō-jē-yā'-wōō-tē, *he had.*

Hǎ-jē-yā'-wōō-tē, *we had.*
 Yē-jē-yā'-wōō-tē, *you had.*
 Hūs-dōō-jē-yā'-wōō-tē, *they had.*

Pluperfect.

Ũ'h-jē-yā'-tē'-yĭn, *I had had.*
 E-jē-yā'-tē'-yĭn, *thou hadst had.*
 Dōō-jē-yā'-tē'-yĭn, *he had had.*

Hǎ-jē-yā'-tē'-yĭn, *we had had.*
 Yē-jē-yā'-tē'-yĭn, *you had had.*
 Hūs-dōō-jē-yā'-tē'-yĭn, *they had had.*

SUBJUNCTIVE MOOD.

Future.

Ũ'h-jē-yā'-nǔ-tē'-nĭ, *if I have.*
 E-jē-yā'-nǔ-tē'-nĭ, *if thou hast.*
 Dōō-jē-yā'-nǔ-tē'-nĭ, *if he have.*

Hǎ-jē-yā'-nǔ-tē'-nĭ, *if we have.*
 Yē-jē-yā'-nǔ-tē'-nĭ, *if you have.*
 Hūs-dōō-jē-yā'-nǔ-tē'-nĭ, *if they have.*

IMPERATIVE MOOD.

E-jēg', *have thou.*

| Yē-jēg', *have ye.*

INFINITIVE MOOD.

Present.

Ů'h-jě-yā'-tě-yī', (*me*) to have.E-jě-yā'-tě-yī', (*thee*) to have.Dōō-jě-yā'-tě-yī', (*him*) to have.Hā-jě-yā'-tě-yī', (*us*) to have.Yě-jě-yā'-tě-yī', (*you*) to have.Hūs-dōō-jě-yā'-tě-yī', (*them*) to have.

Future.

Ů'h-jě-yāc'-guā-tě-yī', (*me*) about to have.E-jě-yāc'-guā-tě-yī', (*thee*) about to have.Dōō-jě-yāc'-guā-tě-yī', (*him*) about to have.Hā-jě-yāc'-guā-tě-yī', (*us*) about to have.Yě-jě-yāc'-guā-tě-yī', (*you*) about to have.Hūs-dōō-jě-yāc'-guā-tě-yī', (*them*) about to have.

Perfect.

Ů'h-jě-yā'-wōō-tě-yī', (*me*) to have had.E-jě-yā'-wōō-tě-yī', (*thee*) to have had.Dōō-jě-yā'-wōō-tě-yī', (*him*) to have had.Hā-jě-yā'-wōō-tě-yī', (*us*) to have had.Yě-jě-yā'-wōō-tě-yī', (*you*) to have had.Hūs-dōō-jě-yā'-wōō-tě-yī', (*them*) to have had.

PARTICIPLES.

Present.

Ů'h-jě-yā'-yŭ-tě-yī', (*I am*) having.E-jě-yā'-yŭ-tě-yī', (*thou art*) having.Dōō-jě-yā'-yŭ-tě-yī', (*he is*) having.Hā-jě-yā'-yŭ-tě-yī', (*we are*) having.Yě-jě-yā'-yŭ-tě-yī', (*you are*) having.Hūs-dōō-jě-yā'-yŭ-tě, (*they are*) having.

Future.

Ů'h-jě-yāc'-guā-tŭ, (*I shall*) be having.E-jě-yāc'-guā-tŭ, (*thou shall be*) having.Dōō-jě-yāc'-guā-tŭ, (*he shall be*) having.Hā-jě-yāc'-guā-tŭ, (*we shall be*) having.Yě-jě-yāc'-guā-tŭ, (*you shall be*) having.Hūs-dōō-jě-yāc'-guā-tŭ, (*they shall be*) having.

Perfect.

Ů'h-jě-yā'-wōō-tě-yī, (*I*) having had.E-jě-yā'-wōō-tě-yī, (*thou*) having had.Dōō-jě-yā'-wōō-tě-yī, (*he*) having had.Hā-jě-yā'-wōō-tě-yī, (*we*) having had.Yě-jě-yā'-wōō-tě-yī, (*you*) having had.Hūs-dōō-jě-yā'-wōō-tě-yī, (*they*) having had.

POTENTIAL MOOD.

Future.

Ů'h-jě-yān'-guā-tě, *I might have.*E-jě-yān'-guā-tě, *thou mightst have.*Dōō-jě-yān'-guā-tě, *he might have.*Hā-jě-yān'-guā-tě, *we might have.*Yě-jě-yān'-guā-tě, *you might have.*Hūs-dōō-jě-yān'-guā-tě, *they might have.*

Pluperfect.

Ů'h-jě-yān'-guā-tě-yŭn', *I might have had.*E-jě-yān'-guā-tě-yŭn', *thou mightst have had.*Dōō-jě-yān'-guā-tě-yŭn', *he might have had.*Hā-jě-yān'-guā-tě-yŭn', *we might have had.*Yě-jě-yān'-guā-tě-yŭn', *you might have had.*Hūs-dōō-jě-yān'-guā-tě-yŭn', *they might have had.*

EXAMPLES OF THE VERB "TO HAVE."

IDIOMATIC PHRASES.

Dā'h sī-tē ū h jīn.
 Dā'h sī-tē dōō jīn.
 Dā'h sī-tē e jīn.

Two are my hands. I have two hands.
Two are his hands. He has two hands.
Two are your hands. You have two hands.

IN ACTUAL POSSESSION.

Hlī'-tā ū'h-jē-wōō'.
 Hlītā e-jē-wōō'.
 Hlītā dōō-jē-wōō'.
 Dā-sū' ē-jē-wōō'?

Knife I have. I have a knife.
Knife you have. You have a knife.
Knife he has. He has a knife.
What you have? What have you?

IDIOMATIC PHRASES.

E dlāg' ūgī' kōō-dsī-tē?

Your sister (?) she lives. Have you a sister?

Hā Ġū-nā'h-ī' kōō-dsī-tē.

Our Saviour, He lives. We have a Saviour.

Yā-qu 'hā-ōō'

Canoe I own. I have a canoe.

Hīt ūgī' ē-yū-ōō'?

House (?) you own. Have you a house?

NOTE.—In English the verb *to have* is often used in the place of *to own*. This is never the case in Hlingit.

VIII.—CONJUGATION OF THE VERB "TO LOVE."

ACTIVE VOICE.

INDICATIVE MOOD.

Present.

Singular.

Hū-sī- hūn', *I love.*
 E-sī- hūn', *thou lovest.*
 Ū-sī- hūn', *he loves.*

Plural.

Tōō-sī- hūn', *we love.*
 Yē-sī- hūn', *you love.*
 Hūs-ū-sī- hūn', *they love.*

Imperfect.

Hū-sū- hūn'-īn, *I was loving.*
 E-sū- hūn'-īn, *thou wast loving.*
 Ū-sū- hūn'-īn, *he was loving.*

Tōō-sū- hūn'-īn, *we were loving.*
 Yē-sū- hūn'-īn, *you were loving.*
 Hūs-ūs- hūn'-īn, *they were loving.*

Future.

Cāc-quā-sū- hūn', *I shall love.*
 Cāc-gē-sū- hūn', *thou shalt love.*
 Cā-ū-gōō- h-sū- hūn', *he shall love.*

Cā-gū- h-tōō-sū- hūn', *we shall love.*
 Cā-gū- h-yē-sū- hūn', *you shall love.*
 Cā-hūs-ū-gōō- h-sū- hūn', *they shall love.*

Perfect.

'Hwā-sī- hūn', *I loved.*
 Yī-sī- hūn', *thou lovedst.*
 Ū-w-sī- hūn', *he loved.*

Wōō-tōō-sī- hūn', *we loved.*
 Yē-sī- hūn', *you loved.*
 Hūs-ū-w-sī- hūn', *they loved.*

Pluperfect.

'Hwā-sū- hūn'-īn, *I had loved.*
 Yī-sū- hūn'-īn, *thou hadst loved.*
 Ū-wōōs- hūn'-īn, *he had loved.*

Wōō-tōō-sū- hūn'-īn, *we had loved.*
 Yē-sū- hūn'-īn, *you had loved.*
 Hūs-ū-wōōs- hūn'-īn, *they had loved.*

SUBJUNCTIVE MOOD.

Future.

Gǔ'h-sǔ-'hǔn'-nǐ, *if I love.*
 Gē-sǔ-'hǔn'-nǐ, *if thou lovest.*
 Ũc-sǔ-'hǔn'-nǐ, *if he love.*

Gǔ-tōō-sǔ-'hǔn'-nǐ, *if we love.*
 Gǔ-yē-sǔ-'hǔn'-nǐ, *if you love.*
 Hūs-ŭc-sǔ-'hǔn'-nǐ, *if they love.*

IMPERATIVE MOOD.

Gǔ-sǔ-'hǔn', *love thou.*

| Gǐ-sǔ-'hǔn', *love ye.*

INFINITIVE MOOD.

Present.

'Hǔ-sǔ-'hǔn'-ĭ, *(me) to love.*
 E-sǔ-'hǔn'-ĭ, *(thee) to love.*
 Ũ-sǔ-'hǔn'-ĭ, *(him) to love.*

| Tōō-sǔ-'hǔn'-ĭ, *(us) to love.*
 Yē-sǔ-'hǔn'-ĭ, *(you) to love.*
 Hūs-ŭs-'hǔn'-ĭ, *(them) to love.*

Perfect.

'Hwá-sǔ-'hǔn'-ĭ, *(me) to have loved.*
 Yǐ-sǔ-'hǔn'-ĭ, *(thee) to have loved.*
 Ũ-wōōs-'hǔn'-ĭ, *(him) to have loved.*

| Wōō-tōō-sǔ-'hǔn'-ĭ, *(us) to have loved.*
 Yē-sǔ-'hǔn'-ĭ, *(you) to have loved.*
 Hūs-ŭ-wōōs-'hǔn'-ĭ, *(them) to have loved.*

Future.

Cāc-quá-sǔ-'hǔn'-ĭ, *(me) to be about to love.*
 Cāc-gē-gǔ-'hǔn'-ĭ, *(thee) to be about to love.*
 Cā-ŭ-gōō'h-sǔ-'hǔn'-ĭ, *(him) to be about to love.*

| Cā-gǔ'h-tōō sǔ-'hǔn'-ĭ, *(us) to be about to love.*
 Cā-gǔ'h-yē-sǔ-'hǔn'-ĭ, *(you) to be about to love.*
 Cā-hūs-ŭ-gōō'h-sǔ-'hǔn'-ĭ, *(them) to be about to love.*

PARTICIPLES.

Present.

'Hǔ-'sǐ-'hǔn'-ĭ', *(I am) loving.*
 E-'sǐ-'hǔn'-ĭ', *(thou art) loving.*
 Ũ-'sǐ-'hǔn'-ĭ', *(he is) loving.*

| Tōō-'sǐ-'hǔn'-ĭ', *(we are) loving.*
 Yē-'sǐ-'hǔn'-ĭ', *(you are) loving.*
 Hūs-ŭ-'sǐ-'hǔn'-ĭ', *(they are) loving.*

Future.

Cāc-'quá-'sǔ-'hǔn', *(I am) about to love.*
 Cāc-gē-sǔ-'hǔn', *(thou art) about to love.*
 Cā-ŭ-gōō'h-sǔ-'hǔn', *(he is) about to love.*

| Cā-'gǔ'h-'tōō-'sǔ-'hǔn', *(we are) about to love.*
 Cā-'gǔ'h-'yē-sǔ-'hǔn', *(you are) about to love.*
 Cā-'hūs-ŭ-gōō'h-sǔ-'hǔn', *(they are) about to love.*

Perfect.

'Hwá-'sǐ-'hǔn'-ĭ', *(I) having loved.*
 Yǐ-'sǐ-'hǔn'-ĭ', *(thou) having loved.*
 Ũ-'w-sǐ-'hǔn'-ĭ', *(he) having loved.*

| Wōō-'tōō-'sǐ-'hǔn'-ĭ', *(we) having loved.*
 Yē-'sǐ-'hǔn'-ĭ', *(you) having loved.*
 Hūs-ŭ-'w-sǐ-'hǔn'-ĭ', *(they) having loved.*

OPTATIVE MOOD.

Present and future.

Gū-kū-sū-'hūn', *let me love.*
 Ū-gū'h-sū-'hūn', *let him love.*

Gū'h-tōō-sū-'hūn', *let us love.*
 Hūs-ū-gū'h-sū-'hūn', *let them love.*

POTENTIAL MOOD.

Future.

Gōō-quā-sī-'hūn', *I might love.*
 Gū-gī-sī-'hūn', *thou mightst love.*
 Ū-gōō'h-sī-'hūn', *he might love.*

Gū'h-tōō-sī-'hūn', *we might love.*
 Gū'h-yē-sī-'hūn', *you might love.*
 Hūs-ū-gōō'h-sī-'hūn', *they might love.*

Pluperfect.

Gōō-quā-sū-'hūn'-īn, *I might have loved.*
 Gū-gī-sū-'hūn'-īn, *thou mightst have loved.*
 Ū-gōō'h-sū-'hūn'-īn, *he might have loved.*

Gū'h-tōō-sū-'hūn'-īn, *we might have loved.*
 Gū'h-yē-sū-'hūn'-īn, *you might have loved.*
 Hūs-ū-gōō'h-sū-'hūn'-īn, *they might have loved.*

PASSIVE VOICE.

INDICATIVE MOOD.

Present.

Hūt-dōō-dsī-'hūn', *I am loved.*
 E-dōō-dsī-'hūn', *thou art loved.*
 Dōō dsī-'hūn', *he is loved.*

Hā-dōō-dsī-'hūn', *we are loved.*
 Yē-dōō-dsī-'hūn', *you are loved.*
 Hūs-dōō-dsī-'hūn', *they are loved.*

Imperfect.

'Hūt-dōōs-'hūn'-īn, *I was loved.*
 E-dōōs-'hūn'-īn, *thou wert loved.*
 Dōōs-'hūn'-īn, *he was loved.*

Hā-dōōs-'hūn'-īn, *we were loved.*
 Yē-dōōs-'hūn'-īn, *you were loved.*
 Hūs-dōōs-'hūn'-īn, *they were loved.*

Future.

Cā-'hūt-gū'h-dōōs-'hūn', *I shall be loved.*
 Cā-ē-gū'h-dōōs-'hūn', *thou shalt be loved.*
 Cā-gū'h-dōōs-'hūn', *he shall be loved.*

Cā-hā-gū'h-dōōs-'hūn', *we shall be loved.*
 Cā-yē-gū'h-dōōs-'hūn', *you shall be loved.*
 Cā-hūs-gū'h-dōōs-'hūn', *they shall be loved.*

Perfect.

Hūt-wōō-dōō-dsī-'hūn', *I was loved.*
 E-wōō-dōō-dsī-'hūn', *thou wert loved.*
 Wōō-dōō-dsī-'hūn', *he was loved.*

Hā-wōō-dōō-dsī-'hūn', *we were loved.*
 Yē-wōō-dōō-dsī-'hūn', *you were loved.*
 Hūs-wōō-dōō-dsī-'hūn', *they were loved.*

Pluperfect.

'Hūt-wōō-dōōs-'hūn'-īn, *I had been loved.*
 E-wōō-dōōs-'hūn'-īn, *thou hadst been loved.*
 Wōō-dōōs-'hūn'-īn, *he had been loved.*

Hā-wōō-dōōs-'hūn'-īn, *we had been loved.*
 Yē-wōō-dōōs-'hūn'-īn, *you had been loved.*
 Hūs-wōō-dōōs-'hūn'-īn, *they had been loved.*

SUBJUNCTIVE MOOD.

The words *ōōsh* (if) and *nōōenī* (when) are used to express the subjunctive mood;
 e. g., 'hūt-dōō-dsī-'hūn'-ōōsh', if I am loved; 'hūt-dōōs-'hūn'-nōōenī, when I am loved.

INFINITIVE MOOD.

Present.

'Hüt-dōos-'hun'-ī, (*me*) to be loved.
 E-dōos-'hün'-ī, (*thee*) to be loved.
 Dōos-'hün'-ī, (*him*) to be loved.

Hä-dōos-'hun'-ī, (*us*) to be loved.
 Yē-dōos-'hün'-ī, (*you*) to be loved.
 Hüs-dōos-'hün'-ī, (*them*) to be loved.

Future.

Cā-'hüt-gū'h-dōos-'hün'-ī, (*me*) to be about
 to be loved.
 Cā-ē-gū'h-dōos-'hün'-ī, (*thee*) to be about
 to be loved.
 Cā-gū'h-dōos-'hün'-ī, (*him*) to be about to
 be loved.

Cā-hä-gū'h-dōos-'hün'-ī, (*us*) to be about
 to be loved.
 Cā-yē-gū'h-dōos-'hün'-ī, (*you*) to be about
 to be loved.
 Cā-hüs-gū'h-dōos-'hün'-ī, (*them*) to be about
 to be loved.

Perfect.

'Hüt-wōo-dōos-'hün'-ī, (*me*) to have been
 loved.
 E-wōo-dōos-'hün'-ī, (*thee*) to have been
 loved.
 Wōo-dōos-'hün'-ī, (*him*) to have been loved.

Hä-wōo-dōos-'hün'-ī, (*us*) to have been
 loved.
 Yē-wōo-dōos-'hün'-ī, (*you*) to have been
 loved.
 Hüs-wōo-dōos-'hün'-ī, (*them*) to have been
 loved.

PARTICIPLES.

Present.

'Hüt'-dōo'-dsī'-'hün'-ī', (*I am*) being loved.
 E-wōo'-dōo'-dsī'-'hün'-ī', (*thou art*) being
 loved.
 Wōo'-dōo'-dsī'-'hün'-ī', (*he is*) being loved.

Hä'-wōo'-dsī'-'hün'-ī', (*we are*) being loved.
 Yē'-wōo'-dōo'-dsī'-'hün'-ī', (*you are*) being
 loved.
 Hüs'-wōo'-dōo'-dsī'-'hün'-ī', (*they are*)
 being loved.

Future.

Cā-'hüt-gū'h'-dōos-'hün', (*I am*) about
 to be loved.
 Cā-ē-gū'h'-dōos-'hün', (*thou art*) about to
 be loved.
 Cā-gū'h'-dōos-'hün', (*he is*) about to be
 loved.

Cā-hä-gū'h'-dōos-'hün', (*we are*) about to
 be loved.
 Cā-yē-gū'h'-dōos-'hün', (*you are*) about
 to be loved.
 Cā-hüs-gū'h'-dōos-'hün', (*they are*) about
 to be loved.

Perfect.

'Hüt'-wōo'-dōo'-dsī'-'hün'-ī', (*I*) having
 been loved.
 E-wōo'-dōo'-dsī'-'hün'-ī', (*thou*) having
 been loved.
 Wōo'-dōo'-dsī'-'hün'-ī', (*he*) having been
 loved.

Hä'-wōo'-dōo'-dsī'-'hün'-ī', (*we*) having
 been loved.
 Yē'-wōo'-dōo'-dsī'-'hün'-ī', (*you*) having
 been loved.
 Hüs'-wōo'-dōo'-dsī'-'hün'-ī', (*they*) hav-
 ing been loved.

OPTATIVE MOOD.

'Hüt-gū'h-dōos-'hün', let me be loved.
 E-gū'h-dōos-'hün', let yourself be loved.
 Gū'h-dōos-'hün', let him be loved.

Hä-gū'h-dōos-'hün', let us be loved.
 Yē-gū'h-dōos-'hün', let yourselves be loved.
 Hüs-gū'h-dōos-'hün', let them be loved.

POTENTIAL MOOD.

Future.

'Hüt-gŭ'h-dōō-dsĭ-'hŭn', <i>I might be loved.</i>	Hä-gŭ'h-dōō-dsĭ-'hŭn', <i>we might be loved.</i>
E-gŭ'h-dōō-dsĭ-'hŭn', <i>thou mightst be loved.</i>	Yē-gŭ'h-dōō-dsĭ-'hŭn', <i>you might be loved.</i>
Gŭ'h-dōō-dsĭ-'hŭn', <i>he might be loved.</i>	Hŭs-gŭ'h-dōō-dsĭ-'hŭn', <i>they might be loved.</i>

Pluperfect.

'Hüt-gŭ'h-dōōs-'hŭn'-ĭn, <i>I might have been loved.</i>	Hä-gŭ'h-dōōs-'hŭn'-ĭn, <i>we might have been loved.</i>
E-gŭ'h-dōōs-'hŭn'-ĭn, <i>thou mightst have been loved.</i>	Yē-gŭ'h-dōōs-'hŭn'-ĭn, <i>you might have been loved.</i>
Gŭ'h-dōōs-'hŭn'-ĭn, <i>he might have been loved.</i>	Hŭs-gŭ'h-dōōs-'hŭn'-ĭn, <i>they might have been loved.</i>

EXAMPLES FOR PRACTICE.

Djŭhl-dŭ-cŭt' hŭs' hŭs-'hŭ-sĭ-'hŭn'.	<i>All them them I love. I love them all.</i>
Hlōōsh-ĭ-g'ā'-yĭ ut 'hŭ-sŭ-'hŭn'-ĭn.	<i>Evil things I was loving. I loved evil (things).</i>
Dicĭ An-kau ca-gŭ'h-tōō-sŭ-'hŭn'.	<i>Above Lord we will love. We will love God.</i>
'Hüt gŭ-yē-sŭ-'hŭn'-nĭ.	<i>Me if you love. If ye love me.</i>
Wōōsh-gŭ-yēs-'hŭn'.	<i>One another love. Love one another.</i>

IX.—CONJUGATION OF THE VERBS "TO GO" AND "TO COME."

To Go.

INDICATIVE MOOD.

Present.

<i>Singular.</i>	<i>Plural.</i>
a Yān-'hŭ-gōōt', <i>I am going (or walking).</i>	a Yān-tōō-ūt', <i>we are going.</i>
Yān-ē-gōōt', <i>thou art going.</i>	Yān-ī-ūt', <i>ye are going.</i>
Yān-ŭ-gōōt', <i>he is going.</i>	Yā hŭs-nŭ-ūt', <i>they are going.</i>

Imperfect.

Gōō-kŭ-gōō-dĭn', <i>I was going.</i>	Gŭ'h-tōō-ä-dĭn', <i>we were going.</i>
Gŭ-gē-gōō-dĭn', <i>thou wert going.</i>	Gŭ'h-yē-ä-dĭn', <i>you were going.</i>
Gōō-gŭ-gōō-dĭn', <i>he was going.</i>	Hŭs gōō-gŭ-ä-dĭn', <i>they were going.</i>

Future.

Gōō-kŭ-gōōt', <i>I shall go.</i>	Gŭ'h-tōō-ät', <i>we shall go.</i>
Gŭ-gē-gōōt', <i>thou shalt go.</i>	Gŭ'h-yē-ät', <i>you shall go.</i>
Gōō-gŭ-gōōt', <i>he shall go.</i>	Hŭs-gōō-gŭ-ät', <i>they shall go.</i>

Perfect.

'Hwä'-gōōt', <i>I went.</i>	Wōō'-tōō'-wŭ'-ät', <i>we went.</i>
Yē'-gōōt', <i>thou wentest.</i>	Yē'-ät', <i>you went.</i>
Wōō'-gōōt', <i>he went.</i>	Hŭs'-wōō'-ät', <i>they went.</i>

a The particle *yān* is the sign of the progressive form. There is no present tense in the indicative mood.

Pluperfect.

'Hwä-gōōt'-in', *I had gone.*
 Yē-gōōt'-in', *thou hadst gone.*
 Wōō-gōōt'-in', *he had gone.*

Wōō-tōō-āt'-in', *we had gone.*
 Yē-āt'-in', *you had gone.*
 Hūs-wōō-āt'-in', *they had gone.*

SUBJUNCTIVE MOOD.

Future.

Nū-'hū-gōōt'-nī, *if I go.*
 Nē-gōōt'-nī, *if thou goest.*
 Nū-gōōt'-nī, *if he go.*

Nū-tōō-ūt'-nī, *if we go.*
 Nū-yē-ūt'-nī, *if you go.*
 Hūs-nū-ūt'-nī, *if they go.*

IMPERATIVE MOOD.

Nū-gōō', *go thou.*

Nū-yē-ū', *go ye.*

INFINITIVE MOOD.

Present.

^a Yän-'hū-gōōt'-ī, *(me) to go (to be going).*
 Yän-ē-gōōt'-ī, *(thee) to go.*
 Yän-ū-gōōt'-ī, *(him) to go.*

^a Yän-tōō-ūt'-ī, *(us) to go (to be going).*
 Yän-ī-ūt'-ī, *(you) to go.*
 Yä-hūs-nū-ūt'-ī, *(them) to go.*

Perfect.

'Hwä-gōōt'-ī', *(me) to have gone.*
 Yē-gōōt'-ī', *(thee) to have gone.*
 Wōō-gōōt'-ī', *(him) to have gone.*

Wōō-tōō-āt'-ī', *(us) to have gone.*
 Yē-āt'-ī', *(you) to have gone.*
 Hūs-wōō-āt'-ī', *(them) to have gone.*

INFINITIVE MOOD.

Future.

Gōō-kū-gōōt'-ī', *(I am) about to go.*
 Gū-gē-gōōt'-ī', *(thou art) about to go.*
 Gōō-gū-gōōt'-ī', *(he is) about to go.*

Gū'h-tōō-āt'-ī', *(we are) about to go.*
 Gū'h-yē-āt'-ī', *(you are) about to go.*
 Hūs-gōō-gū-āt'-ī', *(they are) about to go.*

PARTICIPLES.

Present.

'Hwä'-gōōt'-ī', *(I am) going (or walking).*
 Yē'-gōōt'-ī', *(thou art) going.*
 Wōō'-gōōt'-ī', *(he is) going.*

Wōō'-tōō'-wū'-āt'-ī', *(we are) going (or walking).*
 Yē-āt'-ī', *(you are) going.*
 Hūs-wōō-āt'-ī', *(they are) going.*

Future.

Gōō'-kū'-gōōt'-ī', *(I am) about to be going.*
 Gū-gē-gōōt'-ī', *(thou art) about to be going.*
 Gōō'-gū-gōōt'-ī', *(he is) about to be going.*

Gū'h-tōō'-āt'-ī', *(we are) about to be going.*
 Gū'h-yē-āt'-ī', *(you are) about to be going.*
 Hūs-gōō'-gū-āt'-ī', *(they are) about to be going.*

Perfect.

'Hwä'-gōōt'-ī', *(I) having gone.*
 Yē-gōōt'-ī', *(thou) having gone.*
 Wōō-gōōt'-ī', *(he) having gone.*

Wōō'-tōō'-āt'-ī', *(we) having gone.*
 Yē-āt'-ī', *(you) having gone.*
 Hūs-wōō-āt'-ī', *(they) having gone.*

^a Progressive form.

OPTATIVE MOOD.

Present and future.

Nū-kū-gōōt, *let me go (or walk).*
 Nū-gū-gōōt, *let him go.*

Nū'h-tōō-āt, *let us go.*
 Hūs-nū-gū-āt, *let them go.*

POTENTIAL MOOD.

Future.

Nū'-quā'-gōōt', *I might go.*
 Nū'-gū-yū-gōōt', *thou mightst go.*
 Nū'-guā'-gōōt', *he might go.*

Nū'h-tōō-wū-āt, *we might go.*
 Nū'h-yē-āt, *you might go.*
 Hūs-nū-guā-āt, *they might go.*

Pluperfect.

Nū-quā-gōōt-in', *I might have gone.*
 Nū-gē-gōōt-in', *thou mightst have gone.*
 Nū-guā-gōōt-in', *he might have gone.*

Nū'h-tōō-āt-in', *we might have gone.*
 Nū'h-yē-āt-in', *you might have gone.*
 Hūs-nū-gū-āt-in', *they might have gone.*

There is hardly any distinction made in the verbs "to go," "to come," and "to walk." One verb seems to answer for all three. *Hūt* is used in "to come."

EXAMPLES FOR PRACTICE.

TO GO.

TO GO ON FOOT.

Nāhl dā' wōō-g'ōōt.
 Gōō-dā-sū' yān-tōō-ūt'?

Home to he went. He went home.
Where (?) we are going. Where are we going?

Sā-gūn' nū-quā-gōōt.

To-morrow I might go. I might go to-morrow.

Guāt'-gēn-sū' gū-gē-gōōt'?

When (?) you will go. When will you go?

TO GO BY CANOE.

Sitka'-dā' wōō-kōō'h.
 Gōō-dā-sū' yān-ē-kōō'h?

Sitka to he went. He went to Sitka.
Where (?) you are going. Where are you going?

Sā-gūn' nū-quā-kōō'h.

To-morrow I might go. I might go to-morrow.

Guāt'-gēn-sū' gū-gē-kōō'h?

When (?) you are going. When will you go?

TO GO BY STEAMER.

Gōō-dā-sū' kōōc-guā-ten?
 Dā kōō-wū-tēn gī'?

Where (?) he will go. Where will he go?
Already he has gone (?) Has he gone already?

TO COME.

Ū'h nāhl-īt' ōō-wū-gōōt'.

My to house he came. He came to my house.

Sā-gūn' hāt quā-gōōt.

To-morrow here I might come. I might come to-morrow.

Guāt'-gēn-sū' church dā gū-gē-gōōt'?

When (?) church to you will come.
When will you come to church; or,
When will you go to church; or,
When will you walk to church?

TO WALK.

Yän-'hŭ-gōōt'.

Yü'-dā yän-ŭ-gōōt'.

Cŭ-gŭn' tōō'h yä-gí'-ŭ'.

I am walking.

He is walking over there.

Light in walk ye. Walk in the light.

IDIOMATIC PHRASES.

Hä-gōō'.

E-tōō-wŭ-tē-gí?

Gōōsh-dā'.

Gōōc.

*Come here.**Do you want to go?**Let us go now.**Go ahead.*

X.—ADJECTIVES, ADVERBS, PREPOSITIONS, CONJUNCTIONS, AND INTERJECTIONS.

There are few independent forms of adjectives, participles being used in their place.

1. Some adjectives, especially names of colors, are derived from nouns, e. g., *dōōdj*, charcoal, black; *dlāt*, snow, white; *gän*, fire, red, *djäg'-jin-dü-yŭ*, eagle's feet, yellow; *gāsh g'oo*, blue jay, navy blue.

2. An adjective is placed directly before the noun which it modifies, e. g., *dōōdj szisa*, black cloth.

3. Adjectives may be used as the complement of an incomplete intransitive verb, e. g., *Hli nōōc-ts yä g'äg'*, this apple is sweet.

4. The comparative and superlative degrees are expressed by the use of the adverbs *yün'gä*, *kŭn*, and *tlü'h*, and the comparison always begins with the superlative degree, as—

Superlative: *tlü'h yŭ-gä'-yŭ*, very large.

Comparative: *yün'gä yŭ-gä'-yŭ*, less large.

Positive: *yŭ-gä'-yŭ*, large.

SOME DESCRIPTIVE ADJECTIVES.

crooked, *cŭ'w djŭ-tēg'-yŭ*.happy, *tōō-wōō'-sŭ-gōō'-wōō*.long, *yŭ-yŭdt-yŭ*.large, *yŭ-gä'-yŭ*.noisy, *hlŭ-gau-ōō*.quiet, *hlōō-dŭ-gä'-yŭ*.rare, *dŭ-yēsh-gŭ*.rich, *hlŭ-nähl'-hŭ*.showy, *hlŭ gä'-yŭ*.small, *yä'-gōō-gēn-gŭ*.sweet, *hlŭ-nōōc-tsŭ*.strong, *hlŭ-tsēn-yŭ*.wise, *yä-kōō-dsŭ-gä'-yŭ*.proud, *tōōc-hlŭ-gä'-yŭ*.lazy, *ōō-dsŭ-cä'-yŭ*.old, *wōō-dŭ-shŭn-yŭ*.new, *yēs'*.straight, *hleŭ'w-dsŭ tēgŭ* (not crooked).precious, *gŭ-hlŭ-tsēn-yŭ*.stingy, *shŭ-gāk-yŭ*.grateful, *shtōō'gä-dŭ-tē-yŭ*.easy, *hlōō-hlŭ-dsē'-yŭ* (not hard).hard, *hlŭ-dsē'-yŭ*.soft, *cŭ-shŭ-guäDL-shŭn-yŭ*.rough, *cŭ-sŭg'ŭch-ōō*.distant, *nä-hlä-yŭ*.kind, *tōō-hlŭ-än-yŭ*.bitter, *sŭ-äg'ōō*.

NUMERAL ADJECTIVES.

1. Cardinal numbers answer the question, *g'ōōn-sŭ'*? How many? Ordinal numbers the question, *dä-kōō-ä-sŭ'*? Which in order?

2. Distributives answer the interrogative, *g'ōōn-gŭ'-sŭ'*? How many of each?

3. Numeral adverbs answer the question, *g'ōōn-dŭ-hēn'-sŭ'*? How many times?

4. From 10 to 20 the numerals are 10 and 1, 10 and 2, 10 and 3, etc. From 20 to 30 the numerals are 20 and 1, 20 and 2, etc. This method of counting continues to 100.

From 100 to 1,000 the English words have entirely superseded the Hlingit numerals.

I.—CARDINALS.

one, tlāg'ḥ.
two, dā'h'.
three, nūsz'c'.
four, dā'-g'ōon'.
five, cē-jīn'.
six, tlā-dōō-shōō'.
seven, dū'h-ū-dōō-shōō'.
eight, nūsz'c-ū-dōō-shōō'.
nine, gōō-shōōk'.
ten, jīn'-cāt'.
eleven, jīn'-cāt' kă tlāg'.
twelve, jīn'-cāt' kă dā'h'.
thirteen, jīn'-cāt kă nūsz'c'.
fourteen, jīn'-cāt' kă dāg'ōon.
fifteen, jīn'-cāt' kă cē-jīn'.
sixteen, jīn'-cāt kă tlā-dōō-shōō'.
seventeen, jīn'-cāt kă dū'h-ū-dōō-shōō'.
eighteen, jīn'-cāt kă nūsz-c-ū-dōō-shōō'.
nineteen, jīn'-cāt kă gōō-shōōk'.
twenty, tlā-kă'.
twenty-one, tlā-kă kă tlāg'.
twenty-two, tlā-kă kă dā'h'.
twenty-three, tlā-kă kă nūsz'c'.
twenty-four, tlā-kă kă dā-g'ōon.

twenty-five, tlā-kă kă cē-jīn'.
twenty-six, tlā-kă kă tlā-dōō-shōō'.
twenty-seven, tlā-kă kă dū'h-ū-dōō-shōō'.
twenty-eight, tlā-kă kă nūsz-c-ū-dōō-shōō'.
twenty-nine, tlā-kă kă gōō-shōōk'.
thirty, nūsz'-c jīn-cāt.
thirty-five, nūsz-c jīn-cāt kă cē-jīn'.
forty, dāg'ōon jīn-cāt.
forty-five, dāg'ōon jīn-cāt kă cē-jīn'.
fifty, cē-jīn' jīn-cāt.
fifty-five, cē-jīn' jīn-cāt kă cē-jīn'.
sixty, tlā-dōō-shōō' jīn-cāt.
sixty-five, tlā-dōō-shōō' jīn-cāt kă cē-jīn'.
seventy, dū'h-ū-dōō-shōō' jīn-cāt.
seventy-five, dū'h-ū-dōō-shōō' jīn-cāt kă cē-jīn'.
eighty, nūsz-c-ū-dōō-shōō' jīn-cāt.
eighty-five, nūsz-c-ū-dōō-shōō' jīn-cāt kă cē-jīn'.
ninety, gōō-shōōk' jīn-cāt.
ninety-five, gōō-shōōk' jīn-cāt kă cē-jīn'.
one hundred, tlāg' jīn-cāt-kă.
five hundred, cē-jīn' jīn-cāt-kă'.

II.—ORDINALS.

tlāg' ā, *first*.
 dā'h' ā or dū'h-ā, *second*.
 nūsz-c-ī ā, *third*.

dāg'ōon ā, *fourth*.
 cē-jīn' ā, *fifth*.

Notice that the ordinals are merely the cardinals with the word *ā* appended.

III.—DISTRIBUTIVES.

tlāg'-gā, *one by one*.
 dū'h' gā, *two by two*.
 nūsz-c-ī gā, *three by three*.

dā g'ōon gā, *four by four*.
 cē-jīn' gā, *five by five*.

In counting human beings, the cardinals are used as follows:

tlā'-nū'h' kă, *one man*.
 dū'h-nū'h' kă, *two men*.
 nūsz'-c-ī nū'h' kă, *three men*.
 dā-g'ōon-ī' nū'h' kă, *four men*.

cē-jīn'-ī nū'h' kă, *five men*.
 tlā-dōō-shōō' nū'h' kă, *six men*.
 gōō-shōōk-ōō nū'h' kă, *nine men*.
 jīn-cāt-ī' nū'h' kă, *ten men*.

IV.—NUMERAL ADVERBS.

tlā-dū-hēn', *once*.
 dū'h-dū-hēn', *twice*.
 nūsz-c-dū-hēn', *three times*.
 dā-g'ōon-dū-hēn', *four times*.
 cē-jīn-dū-hēn', *five times*.

tlā-dōō-shōō' dū-hēn', *six times*.
 dū'h-ū-dōō-shōō-dū-hēn', *seven times*.
 nūsz-c-ū-dōō-shōō-dū-hēn', *eight times*.
 gōō-shōōk-dū-hēn', *nine times*.
 jīn-cāt dū-hēn', *ten times*.

ADVERBS.

Adverbs are classified as—

1. ADVERBS OF PLACE.

here, yăt, yă'dōō.
there, yūt, yū'dōō, ūt.
where, gōōdtūt'-sū', or gōō-dtūt'.
where, gōōt-sū'.
where, gōō-dā'-sū'.
where, gōō-sōō'.

wherever, djū-gōō-dtūt'-sū'.
somewhere or anywhere, djū-gōō-sū'.
in the place, ŭg or ä'.
elsewhere, djū-gōō-nū-yā'.
beyond, ŭ-yā'-nū'h.

2. ADVERBS OF DIRECTION.

by what way, gōō-nū'h-sū'.
by this way, yā-nū'h.
by this way, hā-nū'h.
by that way, yū-nū'h.
by that way, wā-nū'h.
by that way, ä-nū'h'.
hence, yā-dū'h.
hence, hā-dū'h.
thence, yū-dū'h.
thence, wā-dū'h.
thence, ä-dū'h'.

whence, gōō-dū'h.
backward, kōō'h'-dā.
upward, cŭn'-dā.
downward, yŭn'-dā.
sideways, wŭn'-dā.
to this place, yā'-dā.
to this place, hā'-dā.
to that place, yū'-dā.
to that place, wā'-dā.
to that place, ä-dā'.
to what place, gōō-dā'-sū'.

3. ADVERBS OF TIME.

when, guăt'-gēn-sū', guăt'-c-sū.
now, yē-dūt'.
where, gōōdtūt'-gān'-sū'.
presently or by and by, hlī-szē.
already, dā.
just now, djū-yā-sōō'.
first, shōō-g'ä'-nū'h'.
next after, yī-nā-dā'.

finally, at length, wā-nū-nē'-sū'.
often, always, all the time, djū-tlāqu.
never, tlāhl.
right away, djū-ŭg'.
sometimes, wān-gŭ-nēn.
last, it'-dā.
then, ägä'.

4. ADVERBS OF MANNER.

This class of adverbs is formed by adding *dān* or *yŭ'h* to a noun, meaning like, as illustrated in the following table:

Table of derivatives.

Noun.		Verb (third person singular).
goodness	g'ē	yŭ-g'ä'.
wickedness	hlōōsh-ē	tlāhl'-ōōsh-g'ē'.
anger	g'ān	g'ānt'-ōō-wŭ-nōōc'.
honor	kā-yā'-ū-wōō-nē'	kā-yā'-ū-wōō-wŭ-nā'.
sorrow	tōō-wōō'-nē'qu	dōō-tōō-wōō-yŭ-nē'qu.
wisdom	yā-kōōs-gē'	yā-kōō-sŭ-gē'.
pride	tōōc-hlī-gē'	tōōc-hlī-gē'.
happiness	tōō-wōō-sŭ-gōō'	tōō-tōō-wōō-sŭ-gōō'.
industry	tōō-hlī-szāk	tōō-hlī-szāk.

Noun.	Adjective (participle).	Adverb.
goodness	yŭ-g'ä'-yī	g'ē-dān'.
wickedness	hlōōshī-g'ä'-yī	hlōōsh-g'ē-dān'.
anger	g'ānt'-ōō-wŭ-nōōc-ōō	g'ān-dān.
honor	kā-yā'-ū-wōō-wŭ-nē-yī	kā-yā'-ū-wōō-nē-dān'.
sorrow	tōō-wōō'-yŭ-nē'qu-ōō	tōō-wōō'-nē'qu-dān'.
wisdom	yā-kōōs-dŭ-gē-yī	yā-kōōs-gē'-dān'.
pride	tōōc-hlī-gē-yī	tōōc-hlī-gē-dān'.
happiness	tōō-wōō'-sŭ-gōō'-wōō	tōō-wōō'-sŭ-gōō'-dān'.
industry	tōō-hlī-szāk-ī	tōō-hlī-szāk-dān'.

Affirmation and negation.

yes, äh'.

| no, tlāg'.

INTERROGATIVE PARTICLES.

For a full list see Verbs, progressive form.

Sü is an interrogative particle used with adverbs of place and time and with interrogative pronouns.

NEGATIVE PARTICLES.

not, tlāhl (denial).

| don't, hlĭ (contraction of hlĭhl).

not, hlĭhl (prohibition).

PREPOSITIONS AND CONJUNCTIONS.

This class of particles is limited to a few separate forms. Their place is generally supplied by adverbs and by the moods of the verb.

kä, and.

| ädä'h', and then.

INTERJECTIONS.

of astonishment, tlā-gōō! hau! szě! hā-dō!

| of impatience, dōō!

of pain, ũ-gŭ-nä! hōō!

| of contempt, ! ōō

of warning, ä!

| of calling, nā! gŭn!

of joy, hē!

| of shame, dā!

of understanding, ũ-hōō! guä! wā-dōō!

| serves you right, hŭch-guä!

of disgust, Ē!

XI.—THE SENTENCE—QUESTIONS AND PHRASES.

THE SENTENCE.

1. In Hlingĭt a verb phrase frequently supplies the entire place of an English sentence.

2. The natural order of a sentence is, (1) object, (2) subject, and (3) verb, although this order is not always followed. Words to be emphasized are usually placed at the beginning of a sentence.

QUESTIONS AND PHRASES.

Well, what do you want?

Hau, däsŭ' ê-tōō-wä' sĭ-gōō?

How are you?

Wä-sŭ' ē-yŭ-tě?

What is your name?

Wä'-sŭ' ē-dōō-wŭ-sä'qu?

Who is that?

Ä-dōō-sŭ'-yŭ?

What is this?

Dä-sŭ'-yä?

What did you say?

Wä-sŭ' yē-yŭ-kä?

Do you hear?

E-yŭ-ŭ'h'-ch gĭ'?

Do you understand English?

English gĭ' gē-yŭ-ŭ'h'-ch?

Where do you live?

Gōōg'-sŭ' yä'-ē-yŭ-tě?

Let me help you.

E-ēt' kŭ-dŭ-shē.

When will you come to see me?

Guät-gēn-sŭ' ŭ'h-cē-cŭn'-dāc-gē-gōōt'?

I am tired.

'Hüt-wōō-dĭ chwētl'.

I thank you very much.

Tlŭ'h gōō-nŭ' hl-chēsh' yä'-yē-yŭ'h-sĭ-kä.

Pardon me!

Djŭ ädä' yä'-nŭ-ōō!

Keep in shore.

Yŭn dā.

Keep from shore.
 I understand.
 The north wind is blowing.
 Who was that?
 Whom do you want?
 Which do you want?
 Where did these things come from?
 I went to his house.
 The dogs follow him.
 Is that right? (Reproof.)
 Come in!
 What's the news?
 Fine weather!
 That will do!
 Let us sing.
 Let us pray.
 Listen to me.
 Jesus loves you.
 Christ died for us.
 I want to be baptized.

Do you believe in God?
 I believe in Him.

Dūk dā.
 Āhōō.
 Hōōn wōō dōō wū nōōk.
 Ādōō sā'-yŭ?
 Ādōō'-sŭ ē' tōō wā' sŭ gōō?
 Dā kōō ā-sŭ' ē' tōō wā' sŭ gōō?
 Gōō-dŭ'h ūt sŭ-wā?
 Dōō hŭt'-ŭ dā'-hwā-gōōt.
 Cātł shōō wōō gōōt.
 Āyŭh ūk wā?
 Nā'hł-gōō'!
 Wā-sŭ' shcŭ-dōō'hł-nec?
 Kōō-tŭ'-cŭ-dān'!
 Dā-ŭ'-wā!
 Ūt-gŭ'h-tōō-shē.
 Sh'cā'-gŭ'h-tōō-dŭ-gāg'v.
 Ū'h gāt' yē-sŭ-ŭ'h'.
 Jesus'-ch yē-sŭ'-hŭn'.
 Christ' hā-gān-yāh wōō-nā.
 Ū'h-tōō-wā'-sŭ-gōō' hēn' ŭ'h-yā-yā'w
 dōōs-nē-yŭ'.
 Dīcī Ankau gŭ' dōō-ēg' ē-yŭ-hēn?
 Dōō-ēg' ū'-hā-hēn.

XII.—MONEY VALUES.

The word *dōn'nā* is a corruption of the word *dollar*. *Gōōt* is a corruption of *bit*, which term, in the early days, was used for a ten-cent piece. *Shōō-wōō'* means *a half*. *Kā* is the conjunction *and*. Thus, *dā'h' gōōt' kā ŭ shōō-wōō'*, 25 cents, literally translated means "2 bits and of it (ŭ) a half" (5 cents).

five cents, gōōt' shōō-wōō.

ten cents, gōōt'.

fifteen cents, nŭsz-c' gōōt' shōō-wōō'.

twenty cents, dā'h' gōōt'.

twenty-five cents, dā'h' gōōt' kā ŭ shōō-wōō'.

thirty cents, nŭsz-c' gōōt'.

fifty cents, cē-jŭn' gōōt'.

one dollar, tlāg' dōn'nā.

ten dollars, jŭn-cāt dōn'nā.

forty dollars, dā-gōōn jŭn-cāt dōn'nā.

seventy-five dollars, dŭ'h-ŭ-dōō-shōō' jŭn-cāt kā cē-jŭn dōn'nā.

one hundred dollars, tlāg' hundred dōn'nā.

one hundred and fifty dollars, tlāg' hundred kā cē-jŭn' jŭn-cāt dōn'nā.

five hundred dollars, cē-jŭn' hundred dōn'nā.

one thousand dollars, tlāg' thousand dōn'nā.

XIII.—HYMNS, PORTIONS OF SCRIPTURE, ETC.

[Translated by Mrs. M. K. Paul.]

JESUS LOVER OF MY SOUL.

1.

Ŭ'h-yŭ-hä-yŭ' Jesus'-ch sŭ'-hŭn',
 Gŭ'-gä ē-jŭ-gät kŭ-dŭ-kēn.
 Ŭ'h-ēn wōosh-cät'-cŭ'w-dŭ-dä',
 Tēt ŭ'h-dä'ng' yä'-gŭ-qŭ-dŭ-yäd't'.
 'Hŭt-hlŭ-sŭn' 'hŭt-wōos-nä'h-ŭ-ä,
 Tēt tlē-yä-dä' yŭ'-nŭs-nŭ',
 Cōo-nŭ-gēg' 'hŭt-gä-gŭ-nä'b,
 O, gŭs-nä'h ŭ'h-yŭ-hä-yŭ'.

2.

Wä-ē, Christ, ŭ'h-tōo-wä'-ē-sŭ-gōō',
 'Hwä-dtä djŭhl-dŭ-cŭt'-ŭt' yä'-nŭ'h;
 Cä-nŭs-hŭnch' wōo-dŭ-gēt-ŭ-ä,
 Yä-jŭc-hlŭ-ŭ' hl kōo-shŭ-tēn'-ŭ-ä.
 E-yŭ-g'ä' tlähl-ōohl-tōoc ē-sä yŭ',
 'Hŭt djŭhl-dŭ-cŭt' tlŭ'h tlähl-'hŭt-ōosh-g'ē,
 'Hŭt-shŭ'w-hlŭ-hŭc' ŭ'h hlōosh-g'ä-yŭ',
 Wä-ē g'ä'gä ē-yŭ-gä'.

HIDING IN TREE.

1.

Gŭ-nä'h-tēn ŭ-cä-dä'
 Yŭ' djŭ-tlŭqu' sŭ-tŭn-ēch
 Ŭ'h yŭ-hä-yŭ' tōo-wōo-ne/qu tēn
 Dōo-'hŭn'-dän-dŭ kŭnch';
 Ŭ'h cŭ chē'-dlŭ kŭ djŭhl-dŭ-cŭt'
 Ŭ'h hloosh-g'ä-yŭ' tēn
 Dōo 'hŭn'-dä ŭ'h^{oo} dlŭ-gän
 Kä dōo-'hŭng' ŭ'h^{oo} dlŭ-sŭn'
 CHORUS: Dōo-'hŭng' ŭ'h^{oo} dlŭ-sŭn', Dōo-'hŭng' ŭ'h^{oo} dlŭ-sŭn'
 Wä-ē' djŭ-tlŭqu' sŭ-tŭn ēch-h ē-sŭ-tē.

MARCHING TO ZION.

1.

Dicŭ' An-kau' sŭ-'hŭn-ŭ-ä hä-dän' gŭ-ät,
 Woosh'-tēn hä tōo-wōo' gŭ-gŭs-gōō',
 Gŭ'h-tōo-shē yä' hlŭ-nōoc-dŭ-shŭ'
 Dōo-däng' wōosht-gŭt-dŭ-ät,
 Dōo-däng' wōosht-gŭt-dŭ-ät.

CHORUS: Yän-tōo-ŭt' dŭcŭn'dä,
 Yŭ-g'ä'-yŭ, yŭ-g'ä'-yŭ dlŭt'-ŭ-cä-dä'
 Wōosh-tēn yän-tōo-dŭ-ŭt,
 Hä An-kau' dlŭt'-ŭ cä dā'.

2.

Hä űt-shē-yī' shī-nū'h-dū-hä
 Kä hä wäk-hēn'ī gū-CHŌŌc,
 Yān-tōō-ūt' yū-g'ā'-yī DLūt'-c cā-dā'
 Yān-tōō-ūt' yū-g'ā'-yī DLūt'-c cā-dā'
 Dīcī'-g' yā'-yū-tē-yī DLūt'-c,
 Dīcī'-g' yā'-yū-tē-yī DLūt'-c.

DOXOLOGY.

Dīcī' An-kau' cū-nī-shāg',
 Djuhl-dū-cūt'-ūt' hä jēg' yā'-ū-yū-ōō',
 Ūch' djūhl-dū-cūt' yē-whānch' cū-nī-shāg'
 Cū-nī-shāg' hä Ish' tlāhl'-ōōhl-tōōc.

THE LORD'S PRAYER.

Hä Ish' dīcī'-g'-yā'-yū-tē-yī, gū'h-tōō-hlū-gā'-wōō E sā-yī', E ān-ī' cā-dū'h hāt-gū-gōōt E hlū-tsēn-ī', yā'DLūt'-c űt'-cōō-nū-āqu, djū ā-dā' wā' dīcī'-g' űt'-ūt-cē-yū-ā-gōō-yē yū'h. Hä-gā'h'-nūs-hä yā'-yūc-yē gū-tōō-wū-'hā-yī-ūt', kā hä hlōōsh-g'ā-yī' djū-ā-dā'-yā'-nū-ōō'h-g', ādā'ōō hāuch'-tsōō' hä 'hōōn-ī' hlingīt' hlōōsh-g'ā-yī' djū ādā'-yā'-tōō ōō'h-g'-yē yū'h, kā hlīhl' E wāk-cāg' ű-tōō'-dā wōō-tōō-āt-īk' kā-tōō-wōō'-ū-cōō-āqu-ūt', ű-tōō-dū'h' kōōā hā-jī-nūhl-ū' hä hlōōsh-g'ā-yī', hä E-ā-yī'h'-sī-tē djūhl-dū-cūt' űt', E-hlū-tsēn'ī' kā E-hlū-sā-yī' djū-tlā'h.—Yān'-gū'tē.

PORTIONS OF SCRIPTURE.

John iii, 16.

Dīcī An-kau yā' hlingīt-ān-ī' tlū'h ű-w-sī-'hūn', űch djū tlā'nū'h' dōō-jē-yū-tē-yī' dōō-Yēt' yā-ū-cā wū-kā; ā-dōō-sū' dōō-cg'-ū-yū-hēn tlāhl' gōō-gū-nā, hä djū-tlā'h kōō-ā yā-kōōc-guās-tē'.

John xiv, 27.

Ū'h cū-yāDL-ī' yē-'hōō-jī 'hwā-nūk', Ū'h cū-yāDL-ī' yē-jēt 'hwā-tē': tlāhl' hlin-gīt' ch wōōsh-jē'h-ōō-dū-tē-ūt' yē-jēt'hwā-tī'. Hlīhl yē-tōō-wōō cū'w-dū-CHēDL-īk, kā hlīhl' tsōō' ű-cū-yī'hl 'hā'DL-īk.

Twenty-third Psalm.

1. Dīcī' An-kau' 'hūt-hlu-tūn'ī-ī'h-sī-te, tlāhl' tsōō dā-su' ű'h-tōō-wā'-gōō'h-sī-gōō'.
2. Szōō-yū'h'-yū-tē-yī cū-yā-nī' ā'-yūn-cū' w-sī-ū-yī-yā'g' 'hūt-ōōs-'hē'ch: 'hūt-jī-nū-tūn'ch hlcōō-dī-nā'-kōō gōōn gū-yā'h-dā'.
3. Ū'h-yū-hā-yī' kōō'h-ūs-gōōt'ch': yū-g'ā'-yī kōō-ōō ű-yī'h' yā-nū-ūt dā yīc'-dā 'hūt-jī-nū-tūn'ch dōō sā-yī' tōō-wā'-dū'h'.
4. Ā, djōō-gōō-nā' ā' kōō-cū'-w-djī gīt-ī nū-nū' gāc-ī' nū'h yūc-quā-gōōt', djū-ān tlāhl' dā-kōō 'hlōōshī-g'ā'-yī-ūt' sū' ā' cā-ūc guāhl' hā DL: hā ű'h-ēn yā-nē űt'-īch; E yū-yē-tsū'-gā-yīch 'hūt-tōō-hlī-tsēn.
5. Ū'h-yā-nā-yī' wāk-shē-yēg' ű'h-gās űt-cū'h'-yū-nē-shēch: gāDL'ch 'hūt-shē-hlū-nīch'; ű'h gōō'-g'ā-yī ű-gā'-nū'h cū-nūhl-wāDL-nōōch.
6. Hä g'ā'gā, djū-wā'-yē-cōō-wūDL-sū' kōō-'hū-ste-yī', E g'ā-yī' kā E tōō-hlū-ān-ī' ű'h-cūg' yāc-'guā-tē': kā Dīcī' An-kau' hītī'-yēg' yā' hūt-gōō-guā-tē' djū-tlā'h.

The Ten Commandments.

I.

Hlĭhl' tsōō ū'h dtāk'g' An-kau'-wōō'h ūt-yē-hlū-yā'h-ĭk'.

II.

Hlĭhl cōō-tē'yā yĭ-hlū-yā'h-ĭk', djū-dāt yū-hā-yĭ' su', djōō dici'-dū'h' ūt', djōō yā' dĭ-yē'-dūh' ūt', kā djōō adĭ' tū-ye-dū'h' ūt': hlĭhl' ū-yā-dā' dlūt-cū'h yē-dū-cnōōn-ĭk', kā hlĭhl ū-jē-yĭs' yā-jē-nāk': hā 'hūt', yē An-kau', ōō-ūt-yu-nē-qu ōō An-kau'-wōō'h 'hut-sĭ-tē, hā ū ish' hūs' hlōōsh-gā'-yĭ' gāg' 'hā wōō 'hu-jē-nōōch djōō nūsz-cĭ ā kā djōō dā-gōōn ā wōōsh-ē-tĭ'h' yān-dū-wūt 'hūt-shĭ-g'ūn-ĭ. Wōōsh-ē-tĭ-yūt'g'ĭ; ā-dū'h ū'h-tōō-hlū-ān-ĭ' kōō-ā ū-wāk-shĭ-yēg' yā'-dā-'hū-nā'-nōōch shū-yū-dĭ-hān-ĭ ānt-kē-nĭ', 'hūt-sĭ-'hūn-ĭ ā kā ū'h yū-gū-tūn'c-ĭ dlōōng-cut' ūhl-tūn ā.

III.

Hlĭhl' yū-kū-tĭ'h' yē-hlū-yā'h-ĭk' dōō sā-yĭ' Dici' An-kau', yē An-kau'; tlāhl' Dici' An-kau'-wōōch djū-ā-dā'-yāc'-guā'-ōō ū hlōōsh-g'ā-yĭ' dōō sā-yĭ' yū-kū-tĭ'h' ūhl-yē'h ā.

IV.

Ū-cūt'-yē-sū-nū-tē Sunday, hlōōhl-tōōc-dān' yĭ-'hlū-tĭn'. Tlā-dōō-shōō' yūc-yē gā'-nū'h' yū'h-nĭ-sū-nē yē yā'-jĭ-nā-yĭ' kā djūhl-dū-cūt' yē-dāt ūt': hā dū'h-ū-dōō-shōō' ā yūc-yē kōōā Dici' An-kau, yē An-kau', yūc-yē-yĭ'h' sĭ-tē: ūcūt' hlĭhl dā-kōō yā'-jĭ-nē sū yā'-dĭ-nāk', djōō yē-whān', djōō yē yēt', kā djōō yē sē', yē kā'-cōō-kūn'-nā-yĭ kā djōō yē shāwūt'-cōō-kūn'-nā-yĭ, kā djōō yē cnās-ĭ', kā djōō yē nāhl-ig' yā'-yū-tē-yĭ gōō-nū-yū-quān': hā tlā-dōō-shōō' yūc-yē gā'-nū'h' Dici' An-kau'-wōōch yūn-wōō-hlĭ-yē'h' dici' kā yā' dlut'c', yū' adĭ' kā djūhl-dū-cūt' ū-cā' yā'-yū-tē-yĭ-ūt', ā-dū'h dū-'hū-dōō-shōō' ā yūc-yē cūt wōō-dlĭ-sā': ūch Dici' An-kau-wōōch wōōhlĭ-gā'w-dū'hū-dōō-shōō' ā yūc-yē kā ū'w-hlĭ-tōōc-tsōō'.

V.

Yē ish' kā yē tlā' gū-yā'-ū-yū-gĭ-nā', ā-gā' Dici' An-kau', yē An-kau'-wōōch yē-jēt ōō-wū-te-yĭ dlūt'cūg' yēc-guā-yādt' yē kōōs-tē-yĭ'.

VI.

Hlĭhl' kē-jūk'-'hĭk'.

VII.

Hlĭhl' yē-tōōs-gōōk'.

VIII.

Hlĭhl' ū-yē tau'-wōōk'.

IX.

Hlĭhl' yē 'hōōn-ĭ-hlingĭt' dā-dū'h' sh' kū-yĭhl'-yēhl-'hĭk'.

X.

Hlĭhl' yē 'hōōn-ĭ-hlingĭt hĭtĭ' dū'h' ū-cĭ-dū-nōōg'-ōōk, hlĭhl yē 'hōōn-ĭ-hlingĭt' shūt' yē-tōō-wā-ōōs-gōōk kā djōō kā-dōō-cōō kūn-nā-yĭ, kā djōō dōō shāwūt'-cōō-kūn-nā-yĭ, kā djōō dōō-cnās-ĭ', kā djōō-dōō gū'w-dān-ĭ, kā djū dā-sū' yē hōōn-ĭ-hlingĭt jē yā'-yū-tē-yĭ ūt.

The Apostles' Creed.

Dōō-ēg'-ū-'hā-hēn Dīcī' An-kau hli-tsēnI hā Ish', dīcī' kǎ yǎ' DLū'-c ū'w-hlī-yē'h-i; kǎ tlānū'h' dōō jē-yūtē-yī dōō yēt', Jesus Christ, hā An-kau, Hlōō-hlī-tōōc-ōō Kǎ-yū-hā-yī'ch Mary'-t jī'w-hlī-hū-yī, Pontius' Pilate' jī'yēt ūt-cā-wū-tsāts, yūn-jī-cū 'w-dōō-dsī-g'ōō', wōō-nā kǎ yū'w-dōō-wū-ōō; nūszē-ī-ā cūt' shū'w-dī-nooc' ūg'-wōō-nā-wōō-yā'-dū'h', dīcīn'dā wōō-gōōt, āt-'h Dīcī' An-kau' dōō Ish' shē-yē-nu'h-ūt' ā'; ā-dū'h' yā-yāc-guā-gōōt' yū'h-yū'w-sī-g'ū-gōō ā kǎ kōō-dsī-tē-yī ā ū-wōōn-gū-jē-yīt'. Ūg'-ū-'hā-hēn Hlōō-hlī-tōōc-ōō Kǎ-yū-hā-yī kǎ djūhl-dū-cūt' hlōō-hlī-tōōc-ōō dōō Church'-ī kǎ Dīcī An-kau yūt'g'ī djū tlāg' wōōsh'-tēn ū-tōō-wōō dū-tē-yī', kǎ hā hlōōsh-g'ā-yī' djū-ā-dā' yāc'-guā-tē-yī', kǎ wōō-nā-wōō-ā shū-gōō'h-dū-kē-yī' kǎ hlōō-nā'h' kǎ-gū-sā'-gōō.

ENGLISH-HLINGIT VOCABULARY.

A.

Abdomen	Kǎ-yū-cū'	Alone	Tlānū'h'
Abed	Sū-tān (he is abed)	Aloud	Dīcī nū'h'
Abhor	Gū-shu-kān (abhor it)	Already	Dā
Abide, to	Yā'-ē-nū-tī (imperative)	Also	Tsōō
Able	Jē-gǎ-yū-tē	Altar	Dāg-gū-dōō-gūg'h-tī'
Aboard	Yāqu gǎ	Altogether	Wōōsh-tēn
Abode	kǎ kōō-ōō'-wōō	Always	Djū tlāqu
Aboriginal	Thu-gōō quan-gī	Amen	Yān'-gū-te
Above	Cīn-ā'	Ammunition	ōōnā shū-gōōn-ī
Abreast	Cēc	Among	Ū'-hōō
Abscess	gēs	Amulet	Dā-nū'qu
Ache	Nēq'u (sick)	Ancestor	kǎ-shū-gōōn'
Acid	Cū-'hlī-szōō' CHōō' (it is)	Anchor	Shū-yā'-nā
Activity	'Hlū-ōōs (playfulness)	Angel	Dīcī An-kau (cōō hūn'ā yī)
Adage	gǎ-yī'		G'ān
Adept	Cū-jūk'°	Anger	Djū-gōō-nū-ā
Admonish, to	Ūt 'hānt-yā'-kōō-dā-yū-kū'	Another	G'ū-cōō-cū-yū-kū'
Adrift	Wōō-hlī-hāsh	Answer	kōōn-shēu'hl-nēc-ī'
Adult	Hlingit-tlēng	Apostle	Gāg
Advance, to	Gōō-nā'. wōō-āt	Apple	Yī-dū-hān (imperative)
Adz	'Hōōdt-ā	Arise	'Hēc
Afar	Nū-'hlī-yā'-wōō	Arm	Ē'-nī-tū ye
Afraid, (is)	Ūqu-dlī-'hādī'	Arm-pit	Hāt - kōō- wū-tū (he arrives)
Aft	Gēc	Arrive	Sūk's
After	Ū-ī'	Arrow	Tē-dt
Afterward	Īt-nū'h	Artery	Cā-nū-gōōt'
Again	Tsōōk	Ascend	Cū-yū-dāg' (he is ashamed)
Against	Gā'-dā	Ashamed	Gūn-ē-tī'
Age	Shān	Ashes	Nū-wōōsz (imperative)
Agony	Ūt-cū-tsāts	Ask	Ānt-kē-nī'
Air	ōōch-jā	Assembly	Gū'w-dī-guātī
Alas!	kōōsh-cū-dān'	Astonish	Āt or tlā k°
Alder	Ca-shish or shā-qu	Aunt	Yās
Alike	Wōōch-yū'h'-dī-tī	Autumn	Cā'-w-dsī-gūī (he awoke)
Alive	Yū-tsēn	Awake	Shū-nū-'hwā'yī
All	Djū'hl-dū-cūt'	Axe	
Almighty	'Hlī-tsēn-ī		
Almost	Tlā'hī'-ōō-nū-'hlī'		

B.

Baby	Dtū-cōō-nā'-yī	Bait	Ūt-yū-nā'qu-ōō
Bachelor	ch-wā	Bald	Shū'w-'hlī-guāsz
Back (the)	kǎ'-dēg'	Ball	Cōō-djā'-dtā
Back bone	kǎ-tōō-dēg-ī	Baptize, to	Hēn-'h yū'w-dōō-tē
Backslider	Wōō-shī-gēDL'-ī ā	Bark, to	Ū-shā'
Bacon	Gōō-shōō-tā-yī'	Barrel	Cāst
Badness	'Hlōōsh-kē	Base-born	Nēch-cū-yūt'ī
Bag	Guā'hl	Basin	Jīn-ōō'szū-yāt

Basket	k'ŭ'-qu
Bass (fish)	'Hlēt-is-dōōc'
Bathe, to	Dä-dū-shōōch
Bay	Ġē
Beach	chŭ-qu
Beads	Cū-wōōt'
Bear (black)	Szēc
Bear (brown)	chōōts
Beard	Gū-dä-dsü-yē'
Beat, to	kōō-jä'-qu (flight)
Beaver	Szī-gā-dī
Bed	Yē-ūt
Bedstead	Cā-ŭ-'hī g'w-'h-ūt'
Bee	Gūn-dä-szāch-ī'
Beg	kōō'h'-ūt-is-gā'h'
Begone!	Jōōc!
Behad, to	Cāt'h kŭ-sū-wōō-szōō'
Behind	īt
Behold	Sh'-kā
Believe	Ūt-kū-hēn (faith)
Bell	Gau
Beloved	Gū-'hlū-tsēn-ġī'
Belt	Sēc
Beneath	Tū-yē
Between	Ū-ġāc'
Bind	Wōōsh-dä-wōōs-ä-'hoo
Birch	Ūt-dä-yī'
Bird	Dtsī-ts-qu or dtsū-dtsē'
Birth	kōō-dsi-tē (he is born)
Biscuit	Gātī
Black	Dtōō dj
Blanket	DLē
Blessed	'Hlū-'hātī'
Blind	'Hlkoosh-tēn'
Blood	Shē
Blow, to	ōōch
Blue	Gāsh-'gōō
Boat	Ān-dä-yāqu-ōō', gūn'-tīn yāqu
Body	kā-dlē-yē' (flesh)
Boil, to	Wōō-dli-ōōc' (it boils)
Boil (tumor)	Ġēs

C.

Cache	Chō'hī'
Calico	Cūsh-chēt'
Call, to	kōō-cēg'
Calm	Cū-yāDL'
Candle	Tōō-szēnā'
Cannon	Ān-dä-ōō'-nā
Canoe	Yā-qu
Can't	Tlā'hī-ä-dā'
Cap	Kū-'hlōō-'hōō'dtā szāch ^{oo}
Cape	Tāk
Captive	Gū'hī-shāt'-ū-dī
Carpenter	Hīt-hlū-yāh-ī
Carpenter	Gā-ch'
Cat	Dōōsh'
Cataract (falls)	Ġās'
Cataract (of eye)	GāDL'
Catch	Ūt-wōō-shāt'
Cattle	chūs
Cane	Tē-tōōc'
Cedar	'Hī
Celery (wild)	Yā-nū-āt
Cemetery	Ā-nū'h-kōōc-dōōs-hād't'- yē'

Bondage	Gōō'h-kōō
Bone	Szāk
Book	G'ōōg'
Borrow, to	Ūt-wōō-hēsē'
Both	Djōō-da'h'
Bottle	Ġn-gē-shā'
Bottom	Ū-tū-cū'
Box	kōōc
Boy	Yū-dū-kwūts'-kōō
Bracelet	Cēs
Brain	kā-tlū-gā-yī'
Branch	Ās-dä-shē-yē (of trees)
Brass	Ġk nādġ
Bread	Sūqu-nān (chinook)
Break, to	Ūt-cū-wōōhl-wāDL'
Breakfast	Dtsōō-tāt-ī-ūt-'hā-yī'
Breast	chāt-cū'
Breath	Dū-sāqu
Bright	Coū' dī-gūn'
Bring	Hāt-tē' (imperative)
Broad	Yū-wōōġ'
Brooch	Yū-au'
Broom	chīdt'-ä
Brother	ēk or ēg' (female speak- ing)
Brother (elder)	hōōn'h (male speaking)
Brother (younger)	cēg' or cēk
Brown	Szū-guāt'
Bucket	Ġē-shā'
Buckskin	Tsīs'-k ^{oo}
Bud, to	Cā-kū-'hīōō-cōw-sī-gōō'
Bugle	Tōō-ōōch'szāt
Build, to	Ūt-wōōhl-yā'h
Bullet	Ūt-cū-tā-yī'
Burden	'Hē-yān-ū-dī
Burlap	chwās-dā'
Burn, to	Cā-wū-ġān (it burned)
Burst, to	Cū-cān-'hī-szē'hl
Bury, to	kā-nā-wōō'-yōū-dōō-ōō
Button	Yū-cū-ōōdt
Buy, to	Ūt-wōō-ōō

Center	Wāk-yīc'
Chain	Wōōsh- nū'h-ġū-cū-cā-' 'hī
Chair	Cā'-yā-nōōch-ch-yāt
Chalk	Wā'-nā
Channel	Sēt
Charcoal	Dtōōdj
Chase, to	Ūt-yu-wōōs-nāk
Cheat	kōōc-shū-dLīn'-h
Checkers	Dā-wā'
Cheek	Wūsh-cū'
Chemise	Dōō-nā'h-DLāc
Chest (part of body)	Wōō-tōō'
Chew	Ġū-dū-tāg'
Chicken	Cāġ
Chief	Ān-kau
Child	Ūt-kūts'-kōō
Chin	kā-tē'
Chips	Ūt-cū-'hōōdt'-tī
Choke (to strangle)	kā-sū-wōō-tsēġ
Chop, to	Ūt-'hōōdt'
Christ	Christ
Christian	Christian

Church	Church	Consumption (disease)	Ūs-kōōk-gōō-nēqu'
Clan	Yū-'hlōō-'hlāt; gāDL	Cook, to	Ūt-sū-ē
Clap	Jin-tāc-dū-dūch'-t	Copper	Īk
Class	Tān	Cork	Ūt-gū-dēg'-l
Clay	Szē'	Corner	Gōōc-shōō-tōō'
Clean	'Hl'hlōō-tōōc	Corpse	kā-nā-wōō'
Clear (adj.)	'Hleōō-dī-nā'k ^{oo} -ōō	Cough	Ūs-kōōk-c
Clergyman	Nūqu-nāt' (Chinook)	Country	Ān
Cliff	GIDL'	Count, to	Dū-tōō'
Clock	Watch (English)	Cow	Wūs-wōōs' (Chinook)
Close, to	Ġāt-shōō-tūn (imperative)	Crab	Szau'
		Cradle	Dtōōc
Cloud	k-ōō-gāsz	Cranberry	Kāsh-cū-hā'-gōō
Coal	Dtōōdj-tē	Crazy (man)	Cū-nū-shōō'-szātī
Coat	Cī-nā-ūt'	Cripple	'Hlū-kūch'-c
Cock	Ġā-szū-wā'	Crooked (it is)	Cōw-jī-tēg
Cod (fish)	Szāg'	Cross (of Christ)	Cū-nāst (corruption of English)
Coffin	kā-dū-cā-dī'		
Cold	kōō-sū-ēdt'	Crow	Dtsu-whā'hl
Collar	Sū-dā; ū-sū-gōō'	Crumbs	Ūt-cū-gā'-hl-tī
Comb	chā'dōō	Crutch	Wōō-tsā-gā'
Come here	Hā-gōō'	Cry	Ġā'h
Comet	Cē-wā-kā-wōō-chōō-dsī'	Curious	Cū-sī-yā'
Comfort, to	Tōō-'hlū-tlā	Curly	Cōū-dī-cōōdj
Comforter	kā-tōō 'hlū-tlā-wōō	Current	Hāt
Communion (Lord's Supper)	Dīcī Ān-kau ūt 'hā-yī'	Custom (old)	Tlū-gōō-kōōs-tē-yī'
Confess, to	Yūn-ūt-cū-wōō-nēc	Cut, to	Ūt-wōō-chāsh (with a knife)
Consider, to	Ūt-dā-yū-tōō-tūnc'		

D.

Dance	Ū-DLā'h	Dirt	Djā'-gōō
Dangerous	Cōō-'hlī-'hād/-shūn'	Dish	Szīg'
Dark (it is)	kōō-cōū-jī-gīt'	Dizzy	Dā-yā-kōō-gūt'-ch
Daughter	Sē'	Dog	Cātī
Day	Yūc-yē	Dollar	Dōn'nā (corruption of English)
Dawn	kē-gē		
Dead	Wōō-nā (is dead)	Door	Ġā-hāt'
Deaf	'Hl'kōō'hl-ū'h'-ch	Dream	Jōōn'
Death	Nū-nū	Dress	Dlāc
Deep	Ġā-dlān	Drink, to	Ūt-dū-nū'
Deer	Gōō-wū-cān	Drowned	Hēn'-ch yā'w'-sī-nē
Defense	kā-yī-nū-hūt'-l	Drum	Gau
Descend	Yā-wōō-gōōt	Dry	chōōc
Devil	'Hlōōshī-kc-yī-ūt' szātī'	Dust	Cū-dūn'-jā
Dinner	Yūc-yē-ūt-'hā-yī'		

E.

Ear	Gōōc'	Englishman	Cān-jōōch-wān' (corruption)
Earth	Dlāt'c		
Easy	Tlā'hl'-ōō'hl-dsē	Enough	Dā'
Eat, to	Ūt-'hū	Evening	chā'nā
Ebb, to	Yā-nū-'hlān'	Everlasting	'Hlōō-nā'h
Egg	Guā'dt	Evil	'Hlōōsh-kē
Elbow	Dtē'-shōō	Eye	kā-wāk
Empty	'Hl'cōō-dū-ūt'		

F.

Face	kā-yū'	Fear, to	Ū-cōō'hl 'hād'
Faith	Ūt-k-ū-hēn;	Feast	kōō-cē'
Fall, to	Wōōs-gēt	Feed, to	kā-gā'h-ūt-tē'h
Far	Nā-hlā'	Feel, to	Dōō-'huā-nōōc (I felt)
Fast	Tlā-qu'	Fence	Kā-nā-'hūn'
Fat	Tī; wōō-dlī-nīl (heisfat)	Fight, to	kōō-'hlū-gau
Father	Īsh	Find, to	Ūt-wōō-dtā

Finger	kā-dlāk
Finished (it is)	Yün-ōo-wū-nē'
Fire	Gān
Fish	'Hāt'
Flag	An-qua-yi; cūnnā
Flame	Gūn-yū-dlōōdt'
Flesh	Dlē
Flood	kēs'
Floor	Dtā'-cū'
Flour	Sū-qu-nān' cū-chōōc
Fly, to	Yān-dū-kīn'
Foam	'Hē'hl
Fold, to	Ūt-cū'-hlū-kwā'-dt
Follow	kā-it' h-wōō-gōōt

Food	kā-gū'-hūn-ū't
Fool	(See crazy)
Foot	kā-gōōs
Forehead	kā-cāk
Forget	Ū-cū't'-e-sū-gū-'k ^{oo}
Fox	Nū-gū-szā'
Free	Dlōōth'-dū'h'
Freeman	dlā-tūqu-kā'
Friend	kā'-hōōn-'l'
Frog	CHICH'-dj
Frost	Cū-chwān
Frying-pan	Cōō-sōōz'cū-yāt
Full	Shā-wū-hīc'
Fur	'Hau

G.

Garden	Ti'
Gather, to	Wōōsh-cū-dā'-yā'-ū t-dā-nē'
Girl	Shāt-kūts'-kōō
Give, to	kā-jēt-ūt-wōō-ti'
Gladness	Tōō-wōō-sū-gōō'
Glass	Īn', idt'-ch
Go, to	Wōō-gōōt
God	Dici Ān-kau

Gold	Gōōn' (corruption)
Good	Yū-kē-yi
Grand father	'Hli-'hl-k ^{oo}
Grand mother	'Hli 'hl k ^{oo}
Grass	Sōōk
Grave (tomb)	kā-dā-cū-dī'
Green	Szōō
Gun	ōō'nā

H.

Hair	Shū-'hā-wōō'
Half	Ū-shōō-wōō'
Halibut	Chāt'l
Hand	kā-jīn'
Handle	Ūt-sūch-ōō'-tī
Hang (to be hanged)	Āst-wōō-dōōs-yāk
Hang	Yū'h-dāk-yū-wōō-ā'h
Happy	Tōō-wōō'-sī-gōō'-wōō
Hard	'Hli-dsē'
Hat	Szāch ^{oo} '
Hate	kōō-shū-kān
Head	kā-shū'
Hear, to	kōō-dōō-ū'h'-yi
Heart	kā-tā g'
Heaven	Dfēi
Heavy	Yū-dā'hl

Heel	kā-gā-tū'qu
Hell	Diyē'
Help, to	kōō'h'-dū-shē
Hide, to	Ū-wōō'hl-sēn
Hill	Gōōch
Hip	kā-kāch'
Hold, to	Ūt-dōō'hl-shūt'-l
Horn	Ūt-shā-dī'
Hot	Yā-wū-dtā'
House	Hīt'
Hunger	Yān
Hunt, to	Yū-nē'qu (it hurts)
Hurry!	Tlā'qu
Husband	kā'-hōō'h'
Hymn	shī'

I.

Ice	Dtēg
Idle (lazy)	ōōs-cā
Inside	Nā'hl
Interpreter	kā-gū-cū-nēc-'l'

Intestines	Ūt-nās-'l'
Iron	Gū-yāsz'; ĩk-yāsz'
Island	Gādt'
Itch	Cū-chwāt'l

J.

Jade	Szōō-tē
Jail	Gū-yāsz'-dā-cū-hīt'-l
Jaw	kā-gūsz

Jealous	ōō'-ūt-nē'qu
Joy	Tōō-wōō'-sū-gōō
Jump, to	Cā-wōōsh-kān'

K.

Kerosene	Szēnā'-tōō-c'h-'l'
Kettle	k-wāt'l'
Key	Cū-tēg'-ā
Kick, to	kōō-wōō-tsāh
Kill, to	kōō-wōō-jāk
King salmon	Dtū'
Kiss, to	kā-gāt'-yū-wōōs-ū'

Knee	kā-cū
Kneel	Yūn-tōōg'-wōō-tsōō'
Knife	'Hli'-tā
Knit	Cūš-nē'
Knock, to	Cū-dū-guā'hl'-sz
Know, to	Ūt-wōōs-cōō'

L.

Lace	Cü-gü'-dä	Life	k'öös-ti'
Lake	Ä'	Light	Cü gü'n'
Lame	'Hlū-küch'-e	Liniment	kä-dä-näs-z'i'
Lamp	Szēnā'	Lip	kä-kü'-hlöo'
Land	dü'-e	Listen, to	kä-gät'-wöös-ä'h
Laugh	Üt-shöök	Lock, to	Üt-gät'-cū-wöo'hl-täg'
Leaf	Cü-yün-i'	Log	'Hau (drift-log or fallen tree)
Learn, to	Shtöo-üt-cöo'hl-göoc'-ch	Long	Yü-yüdt'
Leather	Üt-chüsh'-ti	Look, to	Ü-wöo'hl-gän
Left (side)	Szüdt'-nū'h-ü'	Lose, to	k'ööt-üt-wöo-gëg'
Leg	kü-güts'	Loud	'Hli-gau
Leggins (leather)	Güan'	Love	k'öo-sü'-hün'
Leprosy (sores)	Dlöök	Lumber	Cü-güsz'-ti
Liar	kü'-hlü-yä'hl' szät'i	Lungs	kä-cü-göo'
Lice	Wösz'		
Lid	Üt-yün-ädt'-ü-ni		

M.

Maggot	Wöön	Miracle	kä-yä'-k'ööt-wöo-nē-yi'-yá'-jī-nē'
Maiden	Shät-k	Missionary	k'öo'-üt'-hlü-töo'-wöo
Make, to	Üt'-hlü-yä'h	Mittens	Ts'ig'
Mamma	Tlē'	Money	Dön'nä (dollar)
Man	kä'	Month	Dīs' (moon)
Marry, to	Ü-wöo-shü'	Moon	Dīs'
Mast	Szīs'a-töo-äs-i'	Morning	Dtsöo-tät
Master	kä-szäti'	Mosquito	Tä'-gä
Mat (grass)	Gäch (see carpet)	Moss	Szi-g'-gä
Mate	Ü-yä-yi'	Mother	Tlä'
Measure, to	Üt-döo-cü-yi'	Mountain	Shä
Meat	Dlē	Mouse	Cöo-dtsen
Medicine	Nä'qu	Mouth	Gē'
Melt, to	Cü-wöo'hl'-hlä	Mud	k'öödl-c
Messenger	k'öo-gä'-nū-göot-i'	Multitude	Änt-kē-ni'
Midnight	Tät-yēn	Muscle	Dlē (flesh)
Milk	Dlā-töo'-hün'	Muslin	Göög'-szī'sä
Mind	kä-töo-wöo'		

N.

Nail	Töo-hä'-yi	Nest	Cöot'
Nail (finger)	kä'-häqu	Net	Gä-wöo'
Naked	Cü'hl-dä-gü'-qu	New	Yēs'
Name	Sä	Night	Tät
Neck	kä'-hli-däg'	Noisy	'Hli-gau
Needle	Tä'-güdl	Nose	kä'-hlöo'
Negro	Dtöodj'-kä'	Now	Yē-düt'
Neighbor	kä'-höon-i'-hlingit'-i	Nurse	Yüt'-sü-hän'-i

O.

Oar	Ü'-hä'eöo-dü-yüdt'	Ouch!	öo!
Ocean	ÄDL (salt)	Owl	Dsīs' k ^{oo}
Oil	Ē'h		

P.

Paddle	Ü'-hä'	Patch	Tē'
Paint	Nē'-guäDL'	Pay (indemnity)	kä'gi
Pale	dü'hl'	Peace	Göo-wü-cän; cü-yäDL'
Pan	Gü-yäsz'-szig'	People	'Hlingit
Pants	Töo-kü-tä'hl'	Person	'Hlingit
Paper (see book)	G'öög'	Pig	Göo'-shöo; shü-din'-gä (R)
Paralyzed	'Hlöö-whüch'-c		

Pilot-bread Gätl'
 Pillow Shü-yät
 Pin Gä'-guäDL'
 Pincers Yü-köo'-dsä
 Pinch köo-dtsik't
 Pipe Szék-dä-cät
 Pitch köög'
 Pity Töös-gü-nä'h
 Plate Szig'

Play
 Pocket
 Poor
 Prayer
 Preach, to
 Provision
 Ptarmigan
 Push, to

Üsh-cöo'-hl-yät'
 Gü'hl-töo;tüs-cü-guä'hl'
 kü-nüsh-göo-dä'
 Gü-gäg'
 Sh-cü'hl-néc
 kü-gü-hün-üt'-y
 Cäg
 Cä-köo-wöo-göök

Q.

Quarrel
 Queer

Dü-kän
 Gü-si-yä'

Question, to
 kä-gü wöo-wöosz'

R.

Raft 'Hä-nüsz'
 Rag Üt-szäDL-l
 Rain Së'-w'
 Rat Cöo-dtsen
 Raven Yä'hl'
 Raw 'Hli-shisz'-k
 Razor kä-yü-yé'h'-ä
 Read, to Dü-töo'
 Ready, to be Yün-köo-wöo-né-yi'
 Red Gäu
 Relative kä-én ä
 Remember, to Üt'-cüt-kä-sü-té'-yi'
 Rest Wöo'hl-sü'
 Ribs kä-szöök-cöo

Rice Cöoch
 Rich 'Hli-nä'hl'-h
 Right(side) Shë-nü'h-ü'
 Ring, to Guä'hl (imperative)
 Ring Dlëk-cü-cës'
 Ripe Yün-cä-wü-dtä'
 River Yü'h-cä-wü-dä-yi-hën'
 Road Dä
 Roll, to Üt'-üt-cü-wöo-guätl'-i'
 Rope Tig
 Rough Cü-si-güch'^{oo}
 Round Töo'hl-djün'-yü'h'
 Rubber Szë'hl'
 Run, to Wöo-shëch

S.

Sail Szäs'ä
 Salmon 'Hät'
 Salt ÄDL
 Sand DLä''w
 Saw chüsh'-ä
 Scissors kä-shü-chüsh'-ä
 Scream Cü-dü-gäh
 Seal, hair Tsä
 Seal, fur Göön'
 Servant Cöo-kün'-ä
 Sew, to Du-kász'
 Shade Chë'-gi
 Shadow kä-yü-hü-yi'
 Shaman I'h-dt
 Sharp Yä-küds'
 Shirt köo-düsz'
 Shoes Té'hl'
 Sickness Në'-qu
 Sin 'Hlöösh-kë'
 Sinew Tüs
 Sing, to Üt-shi
 Sister (elder) Shüt'h (female speak-
 ing)
 Sister Dläg' or dläk (male
 speaking)
 Skin Döoc
 Sky Göosz'
 Sled chidtä-yät
 Sleep Tü
 Smell, to Üt-is-nëg'
 Smile, to Üt-cü-nöots'-h
 Smoke Szäk
 Sneeze, to Ü'hl-dtsis' chnä

Snow
 Soap
 Soft
 Sou
 Song (see hymn)
 Sorrow
 Soul
 South
 Speak, to
 Spirit (see shadow)
 Spirit (Holy)
 Spoon
 Stairs
 Stand, to
 Star
 Steal, to
 Steam
 Steer, to
 Step, to
 Stockings
 Stomach
 Storm (wind)
 Strong
 Study (see read)
 Suddenly
 Summer
 Swallow, to
 Sweep, to
 Sweet
 Swim, to
 Swollen

Dlät
 öosz'-ä
 Cü-shi-guäDL'-shün'
 Yët
 Shi
 Töo-wöo'-né'qu
 kä-yüc-guä-hä'-yü-göo
 Ich-cë', dä-ce'
 Yü-gü-tänc'
 kä-yü-hü-yi'
 'Hlöö'ht-i-töoc-öo, Kä
 yü-hü-gi'
 Shü'hl'
 Dsät
 Yün-wöo-häu
 köo dü'h-ä-yü-nü-hü'
 Üt-tän'
 Gü-qu'-jä
 Yü-wöo'hl-ät
 Cü-wöo'hl-yäsz'
 DLë-guän
 kä-yü'
 Ü-yü-dt-të (it blows)
 Hli-tsën (he is strong)
 Dü-töo'
 Djü-yük'^{oo}-dü'h'
 köo-tän
 Üt-wöo-nöo'dt
 Wöo-du-chë'dt
 'Hli-nöoc-ts (it is sweet)
 Üsh-cöo-dü-dl-jä
 Wöo-di-güch (it is swol-
 len.

T.

Table	Nā-dā'qu	Tide	kēs'z
Tail	Det	Tie, to	Ūt-cū-wōō-dōōg'
Talk, to	Yū-gū-tūn'c	Tired (he is)	Wōō-dī-chwēt'
Tell, to	Cū-nū-nēc (imperative)	Tobacco	Gūnch'
Tent	Szisa-hit'	Toes	k ā-gōōs-dlēc
Thank you	Gōō-nū'hl-chēsh'	Tongue	kā-dlōōdt
Thick	Yā-qu'-sī-cūc	Tool	Ūt-shū-gōōn'-i'
Thimble	dlēc-shūnā-ūt'	Tooth	kā-ōō'h
Think, to	Yū-tōō-tūn'c	Towel	Yū-guān'-ā
Thread (see sinew)	Tūs'	Trade	Dū-hōōn
Throat	kā' hla-cū-chōōg'	Tree	Ās
Thunder	chātł	Truth	Gā-gā-ūt'

U.

Umbrella	Cā-dū-kīnch-szāch'oo	Upright	Cīn-dū-chōōn'
Understanding	Dā-yā-ūt-kōō-shōō-sū-gē'	Urinate, to	Ū'hl'ōōg'

V.

Vacant	Tlā'hl'-ōō-dū-kūt' (it is vacant)	Village	Ān
Vein	Tēdt	Voice	Sē'
		Vomit, to	Ī'hl-kōō'

W.

Walk, to	Wōōsh-cāt'-wōō-dū-gōōt	Wind	ōōch'-jā
Want, to	k ā-tōō-wā'-ūt-sū-gōō'	Window	'Hī-wāk-ī'
Warm	Yū-dtā	Wing	Cīch'
Wash, to	Dū-ōōs'z-c	Winter	Tāqu'
Water	Hēn'	Wolf	Gōōch
Wave	Tēt	Woman	Shā-wūt'
Weather	kōō-tī'	Wood	dlōō-wōō'
Wet (it is)	Wōō-dī-dlāk'	Word	Yū-kū'
Whisky	Nau	Work	Yā'-jī-nē'
White	Dlāt (snow)	Write, to	Cūsh-chēt
Wife	Shūt'		

Y.

Year (winter)	Tā'qu	Yet	Djū-ān
Yellow	Djāk-jīn-dā-yī'-yū'h'	You	Wā-c'
Yes	Āh	Young	Yēs' (new)
Yesterday	Tūt-gē'		

HLING'IT'-ENGLISH VOCABULARY.

A.

Ā' (rising inflection)	Lake	Ā-nū'h-kōōc-dōōs-hādt'-	
Ā' (falling inflection)	Yes	yē'	Cemetery
Ā-dā'-nū-ōō	Excuse	Ānt-kē-nē'	Multitude
Ādl	Ocean (salt)	Ās	Tree, or trees
Ādt	Cold	Ās-dā	Trunk of tree
Ān	Village (town)	Ās-dā-shē-yī	Branches
Ān-cū-yēh'-ā	Plane	Ās-gōō-tōō	Forest
Ān-dā-ōōnā	Cannon	Āshūt	Steel-head fish
Ān-dā-tōōch	Ant, or insect	Āst-wōō-dōōs-yāk	To be hanged
Ān-dā-yā-gū-ōō'	Boat	Āt	Aunt
Ān-dōō-kā-ū'	Scales	Āt-lān	Large, very much
Ān-kau	Lord, chief	Ā-yū'h-ō'-wā-gwū'tł	To capsize
Ān-quā'-yī	Flag		

C.

Căc	Uncle
Că'dlū'-dū-yāsz	Seagull (gray)
Că-dū-kīnch szăch ^{oo}	Umbrella
Căg'	Forehead
Căg'	Chicken (grouse)
Căgōō'	Lungs
Că-kōō-wōō-gōōk	To push
Căn'-l	Brother-in-law or sister-in-law
Că-nū-gōōt'	To ascend
Că-shīsh'	Alder
Căst	Barrel
Cătl	Dog
Că-ū'-hěg ^{oo} 'h ūt'	Bedstead
Că'w dsi-git'	To awake
Că-yā-nōōc-ch-ūt	Chair
Cē'	Knee
Cēc'	Abreast
Cēg'	Younger brother or sister
Cē-jin-kās	Five yards
Cē-jin-ūt-dū'hlē	Five pounds
Cēs	Bracelet
Cēt'	Orca (whale killer)
Chăc	Skeleton
chă'-dōō	Comb
Chăn	Mother-in-law
chă'-nă	Night, or evening
Chăs	Pink or humpback salmon
chăt-cū'	Breast (chest)
chătł	Thunder
Chătł chōōc	Dried halibut
chă'tł-tă-gă-ył	Big sand fly
Chē gı	Shade
Chēn	Fly (house)
chīch-dj	Frog
chid-tă	Broom
chōōc	Dry
chōōd-st'	Smouldering coals
chōōn	North wind
Chōō-năt	Arrow (sharp-pointed)
chōōts	Cinnamon bear
Chēch	Porpoise
Chū-cūn	Hay or dead grass
chūd-tă-yăt	Sled
Chūn	Odor
chū-qu	Beach
chūsh-ă	Saw
chwă	Bachelor
chwăs-dă	Burlap
Cīch	Wing
Cīch 'h-ū-nū-găt	Rainbow
Cī-nă-ūt'	Coat
Cīn'dă	Upward
Cīn'dă-chōō-năt	Duck (mallard)

Cīn-dū-chōōn	Upright
Clădt	To lick with the tongue
Clăg'-dis	One moon
Clăg-tă'qu'	One year, one winter
Clăg'-yū'k-yē	One day
Clō'h-dtă	Red cedar boards
Cōō-CH	Rice
Cōō-CHē-dă	Writing or print
Cōō-CHē'-dă	Pen or pencil
Cōō-djă'-dtă	Ball
Cōō-dtsēn	Mouse or mice
Cōō-hłł'-hădl'-shūn-l	Dangerous
Cōō-hăn-ti	Orphan
Cōōk	Pit
Cōō-kūn-ă	Servant
Cōōn	Hem
Cōōsh-dă	Otter (land)
Cōōt	Nest
Cōō tē' yă	Totem pole
Cū-căn	Yarn
Cū-chwă'h	Cranberries (high)
Cū-chwăn	Hoar frost
Cū-dăg'	Shame
Cū-dtīg-ă	Pestle
Cū-dtīg-ă-yăt	Mortar
Cū-dū-guăhl-sz	Knocking
Cū-dūn'-jă	Dust
Cū-gū-ă	Veil or netting
Cū-gūn'	Light
Cū-g'ūs-z'-tł	Lumber
Cūhl-dă-gū'-qu	Naked
Cū'hl-szăch-k	Bareheaded
Cū-hłł-szōōch-ōō'	Sour
Cūhl-tēhl-k	Barefooted
Cū-jūk ^{oo}	Adept
Cū-kă-djū-dł	Tattoo marks
Cū-năst	Cross
Cū-nu-dtū	Huckleberries (high)
Cū-nū-nēc	Tell (thou)
Cū-nū-shōō'-szăt-l	Drunkard, or crazy
Cūsh-CHēt	Calico, or print
Cūsh'-CHēt'	To write
Cūshı-guădl-shūn	Soft
Cū-sı-g'ū-CH ^{oo}	Rough
Cū-sı-yă'	Queer
Cūs-nē	To knit
Cū-sūn	Waist
Cū-tēg-ă	Key
Cū-ūt'	Covering
Cū'w dji-tēg'	Crooked
Cū'w dtł cēōđj	Curly
Cū-wōōhl-yăsz	To step
Cū-wōōt	Beads
Cū-yădl	Peace, or calm
Cū-yăn-l	Leaves

D.

Dă' (rising inflection)	Enough
Dă' (falling inflection)	Road, or path
Dă' (rising inflection)	Please
Dă' (falling inflection)	Ermine
Dă-dū-shōōch	Bathing
Dă-cē	Oceanward

Dăg'-gū-dōō-gūg' 'h-tē	Altar
Dă-nă-qu	Talisman, or charm
Dă'-nă-shōō-yă'h	50 cents' worth
Dău	Seaweed (Englishdulse)
Dă-wă'	Checkers
Dă-wă'-tū-yē-dtă'-ył	Checker board

Dä-yä-kōō-güt'h	Dizziness	Dōō	His, hers, its
Dä-yä-üt-kōō-shōō-sū-gē'	Knowledge, or understanding	Dōōe	Skin
Däg or dēg	Back	Dōōe	Cotton tree
Dici Än-kau	Lord, or chief; God	Dōō-nä'h-DLäc	Chemise
Dis	Moon	Dōōsh	Cat
Di'-yē'	Place of honor, opposite entrance	Dōō-oz	Soot
Di-yē'	Below	Dōōt	Hiccough
DjäDL	Pale	Dōō-wä-cü'	Snuff
Djäg'	Thimbleberries	Dsäs	Thongs
Djäg'	Eagle	Dsät	Steps, ladder
Djäg'-l'	Index finger	Dsäs-k ^{oo}	Owl
Djäg'-jinnl	Yellow	Dsōō-nä	Missile
Djä-qu	Long ago	Dsün'-tl	Flounder
Djēn	Braid of hair, hair ribbon	Dtä	Board
Djēt-gü'	Skate	Dtä-cü	Floor
Djōō	More	Dtä-g ^{oo}	Wart
Djōō-da'h	Both	Dtäh	Fishhook for trout
Djū-än	Yet	Dtän	Wool
Djū-gōō-nü-ä	Another one	Dtäu	Long feather
Djū'-hul-dü-cüt	Everyone, all	Dtä-wük'	Goose
Djū-tlūqu	Always	Dtēg'	Ice, hard
Djū-yū-g'ōō	Right away, quickly	Dtē-shōō	Elbow
däc	Dress	Dti	Heat, sweat
Dlä-dü-dän'	Sidewise	Dti-cü'	Alongside
Dläg	Wet wood	Dtis-qu	Moose
Dläg'	Sister (male speaking)	Dtōōe	Cradle
dläk	Finger	Dtōōdj	Charcoal, black
dläk-cü-cēs	Finger ring	Dtōōdj-kä'	Negro
dläk-shü-nä-üt'	Thimble	Dtōōdj-tē	Coal
Dlä-kwü-dj	Wild rhubarb	Dtsäch	Ground hog
Dlät	Snow, white	Dtsä-yi	Fragrance
Dlät-kä	White man	Dts-hin'	Muskrat
Dlät-shä-wüt'	White woman	Dtsōō-tät'	Morning
dlä-tūqu-kä'	Free man	Dtsōō-tät'-l-üt'-ha-yi	Breakfast
Dlä'ōō	Sand	Dtsü-whi'hl	Crow
Dlē	Meat, muscle	Dtü	King salmon
Dlē-g'uän	Blanket	Dtü-cōō-nä'-yi	Baby, infant
Dlēt	Stockings, socks	Dü-äc	Weaving, basket
Dlōōe	Tail (of mammals)	Dü-chied-qu	Sweeping
Dlōōdt	Tyul salmon	Dä-güt'-gē'-yä'	Humming bird
Dlōōdt-tläk	Tongue	Dü-hōōn	Selling
Dlōōg-tl	Snake, or serpent	Dü-gän	Quarreling
dloōk	Worm	Dü-käsZ'	Sewing
Dlōō-wōō	Sore	Dü-nūqu-sz	Halibut fishing.
Dlōō-wōō-shü'hl	Wood	Dü-nūqu-szi	Orion
Dlüt-e	Wooden spoon	Dü-ōō'	Buying
Döl	Country, land	Dü-ōōsz'-c	Washing
Dön'nä	Interjection	Dü-säqu	Breath
	Dollar (corruption of English)	Dü-shōōch	Bathing
		Dü-tōō'	Reading, counting

E.

E	Thy, thine	Ēk' (rising inflection)	On the beach
E!	Exclamation of disgust	Ēk (falling inflection)	Copper
Ēch	Reef, or rock	Ēk-nädj'	Brass
Ē'da	Phosphores (in water)	Ēn-ä	Relative
E-e-tē	Your seat	Ēn-wōō	Food taken from a feast
Ēg'	Brother (female speaking)	Ēt	Room
Ēg'	Call, hallooing	Ēt-cü'	Inner room
Ē'h	Oil, grease	Ēt-i	In its place

G.

G'a	Peninsula	G'oodl	Buttocks
Gā'	Is that so!	G'oodl	Whirlpool
Ġāc	Canyon	G'oodl-dān	Excitement
Gā-ch	Woven mat	Gōō-dūsz	Shirt
Gā-ch'oo	Ducks	G'ōōg'	Paper, book
G'ā-DL	Silence	G'ōōg	Gum, pitch, resin
Gā-DL	Clams	Gōōg'-ā	Cup, dipper
Ġā-DL	Hair oil, skunk cabbage	Gōō'h	Rabbit
Gā-dlān	Deep water	Gōō'h	Slave
G'ādt	Island	Gōōk'-shōō-tōō	Corner
G'āg'	Apple	Gōōn	Fur seal
Gāg	Leanness	Gōōn	Cold spring
G'āgā	Really, honestly	Gōō-nā'-shish'	Molasses (corruption of English)
Ġā-g'oo	Herring eggs		Potatoes
Ġā'h	Weeping	G'ōōndts	Abalone shells
Gāk	Lynx	Gōōn'-hā	How much, how many
Ġāk	Gray fox	G'ōōn-sū'	Thank you
Gān' (rising inflection)	Out of doors	Gōō-nā'-hl-chēsh'	Some one else
Gān' (falling inflection)	Smoke hole	Gōō-nū-kā	Something else
Gān	Fire, red, sun	Gōō-nū-ūt	Strangers
G'ān	Anger	Gōō-nū-yū-quān	Feet
G'ās	Waterfall	Gōōs	Toes
G'āsh	Thigh	Gōōs-dlākī	Thumb
Gā'sh-g'ōō	Blue jay, navy blue	Gōōsh	I don't know
Gāsz	Foundation posts	Gōōshā'	Gorilla
Ġāt	Silver salmon	Gōōsh-tā-kā	Soles of feet
Ġā-tā'	Trap	Gōōs-tāc	Whip (for weapon)
Gātl	Hard-tack, tree fungi	G'ōōsz'	Sky
Ġā-tū-qu	Heel, or heels	Gōōsz	White men
Gau	Bell, drum, time	Gōōsz-gī-quān	Arrow (blunt)
Gā-wōō'	Seine (net)	Gōō'tl	Deer
Ġē	Bay	Gōō-wū-cān	Eggs
Gē	Mouth	G'ūādt	Bag
Gēc	Stern of a boat	Gūā'hl	Dagger
Gē-g'ūāDL	Pin	Gūāhl-ā	Fern root (edible)
Gē-hēn-i	Saliva	G'ūāhl-'h	File
Gēhl-jā'	West wind	G'ū'-dā	Cork (stopper)
Ġē'hl-jā-tlān	Strong wind	Ġ'ū-dēg'-i	Snipe
Gēn	Totemic painting in a house	Ġūdl-dā-yā'-yī	Edge
G'ēs	Swelling, boil	Gū-gū	Sun
Gēsh	Kelp	Ġū-gūān	Door
G'ē-shā'	Pail, bucket	Ġū-hāt	Rabbit skin
Ġēt'	Squall	Gū'h-dōō-gōō'	Squirrel
G'i	Haunch	Gū'hl-scāz	Firewood
G'ī-dāt	Skirt piece (dancing costume)	Gūn	Saviour
GīDL	Cliff, precipice	Gūnch	Tobacco
Gīdlā	Grindstone	Gūn-ēti	Ashes
Gī-dōn	Stand up	Gūn-tēn-yū-qu	Steamer
Gīn-chā'-yī	Roses	Gūn-yū-dlōōdt	Tongues of fire, blaze
G'ī-sān-i	Boys	Gū-qū'-ja	Steamer
Gōōc	Ear	Gūsz	Jaw
Gōōc'	Go ahead!	Ġūsz-dū-tāg'	Chewing
Gōōch	Wolf	Gū'w dān	Horse (Chinook)
Gōōch	Hill	Gū wōōhl	Doorway
G'ōōch	Marten	Ġū-yāsz	Iron, steel
Gōō-cū-jāsh	Earrings	Gū-yāsz-z-dā-cū-lāt'-i	Jail, prison

H.

Hā'	Our, or ours	'Hā	War, warriors
Hā	But	'Hā-cō-wāt	Long oars
Hā'	This (demonstrative pronoun)	Hā-dā'	This way (adv.)
Hā'	What? (answer to call)	Hā-dā	That way (adv.)
		Hādl	Dung

Hä-dtä	That one	Hli-ädl	Salty
'Hä-nüsz'	Raft of logs	Hli-dëg	Nape of neck
'Hä-qu	Nails (finger)	Hli-gäs	Unlucky, unlawful
Häs	Nausea	Hli-gau	Loud
Hät	Current	Hli-hl	Negative particle
'Hät' (rising inflection)	Fish	Hlingit	The people, a person
'Hät' (falling inflection)	Hair, or fur	Hli-nöoc'-ts	Sweet
'Hau' (rising inflection)	Log (floating)	Hli-öös	Mischievous
Hau	Fallen tree, log	Hli-sä-yi	Famous, well known
'Hä-wäk-i	Window	Hli-shisz'-k	Raw
Hä-wä'sü	Certainly	Hli-tä	Knife
Hé!	Exclamation of delight	Hli-töoch	Fresh (meat or fish)
'Hé	Burden, pack	Hli-tsén	Strong
'Héc'	Shoulder	Hlöö'	Nose
'Héc-dl'	Slime (on fish)	Hlöö-cü-nä	Minor sorcerers
Hé-gi'	Indian doctors' pay	'Hlöödt	Eels
'Hé-hl'	Foam	Hlöög	Urine
Hén	Water	Hlöög'-änä	Handkerchief
'Hësh'	Rash	Hlööhl	Fire weed
Hé-yü'	Exclamation of impa- tience	Hlöö'-hl-jinnī	Vest
'Hī'	Yellow cedar	Hlööon	Bark of spruce or hem- lock
Hī'h'-ch	Frog	Hlöö-nūs	Nose ring
Hit'	House	Hl-szüti-shawut	Widow
Hit-cü'	Roof	'Höö	Among
Hit-cü-dtä-yi	Shingles	'Hööd-tä	Adze
Hit-tü-é-ti	House foundation	'Höoh	Husband
'Hī-wäk'-i	Window	Höön'h	Elder brother (male speaking)
Hlä-cü-chöög	Throat (outside)	'Höön-ä'	Friend
Hlä-göö	Red paint for face	Hööts'-ä-nöö	Native whisky
Hlä'h	Dead tree, blasted	Hüch-güä	Serves you right!
Hläh-l	Flabby	Hün	Standing
Hlä-küsc	Seaweed	'Hün	Near
Hlë'h'-köö	Grandmother or grand- father	Hüs	They, or them
Hli	Don't	'Hüt	I, or me

Iät'-ch	Glass	I.	
I'hd	Indian doctor	Īn-ge-shä	Bottle
		Īsh	Father

Jä!	Keep still, hush	J.	
Jä'-ji	Snow shoes	Ji-shü-göön	Tools
Ji'-hün-üt	Weapon	Jöoc!	Begone
Jin	Hand, or hands	Jügi	Sling
Jin-cät	Ten	Jün	Dream
Jin-di	Sleeve	Jün-wöö	Sheep

kä' (rising inflection)	Man	K.	
kä' (falling inflection)	One's own	Kä-nä-wöö'	Corpse
kä' (falling inflection)	And (conjunction)	Kä-nä-wöö-gü'-dä	Burial feast
Kä-cü-chwän	Flowers	Käs	Yard
kä-dä-cät-i	Coffin, dead house	käsh	Hip
Kädl	Thin	kä'-shän	Old man
kä-dü-göö	It's skin	käsh-cü-hä'-göö	Cranberries (low)
kä-én-ä-hüs	One's relatives	käshü-chüsh'-ä	Scissors
Kä-g'oo	A cut from a knife	Käs-shöö-wöö	Half a yard
kä'-gööc'h	Man alone	Käsz	Stick-splinter
kä-göös	Foot (its)	Ää-sz-öök-öö	Its rib
kä-göös-é-ti'	Footprints	kä-té	Chin (his)
Kä-göös-göösh	Large toe	kä-töö-wöö-ü-cöö-a-qu- üt	Temptation
kä-gü-cü-néc-Y'	Interpreter	Kä-yäs-dä-kü-hüt-Y	Prison
kä-gü'-hün-üt'-Y	Provision	kä-yäc-güä-hä'-yü-göö	The soul
kä-güts	Leg (its)	kä yü-hä-yi	Shadow, spirit, picture
kä-nä	Awl	köödl-c	Mud, earth

kōōdli-dā
kōō-dū'h-ū-yū-nū-hū'
kōō-ēg'
kōō-ēg'-i
Kōōg'
kōō-gā-nū-gōōt-i

kōō-gāsz
kōō-gōōsz
kōō'h-dā

Shovel
Star, or stars
Feast
Invited guests
Witch
Messengers sent to in-
vite
Fog
Cloud or clouds
Backward

kōō-ōō
Kōō-ōō-wōō
Kōō-sā-ādt
kōō tān
kōō-ti'
Kōō-tlē'-tā'
Kū-nē'q-dā-kū-hīt'i
Kū-nūsh-gū-dā
kū-qu

Inhabitants
Home or homes
A cold
Summer
Weather
Shovel (large)
Hospital
Poor
Basket

N.

Nā'
Nā
Nā-chān
NādL
Nāg
Nāgū-szā
Nāhl
Nā'h-l-ā
Nāhl-yē
Nāq
Nā-qu
Nā-qū
Nā'-qū
Nās
Nā-sū-ā'
Nau

Clan
One family
Chilkat blanket
Basket used for packing
Marble
Fox
Room
Far off
Inside a room
Halibut bait
Medicine
Devil fish
Squid or cuttle fish.
Intestines
Covered pail
Whisky

Nēqu
Nē'-quāDL
Nēsz
Nōō'
Nōōc
Nōōc-shē-yān
Nōō'-dtūn-i
Nōōg'
Nōō'h-ōō'
Nōōk't
Nū-dā-qu'
Nū'h^{oo}
Nū-nū
Nū-qu-szātī
Nūs-dāt

Sickness, pain
Paint
Sea urchins, syphilis.
Fort
Breeze
Mink
Palate
Shells or porcelain
Rectum
Grouse (male)
Table
Halibut hook
Death
Witch
Last night

O.

ōō
ōōch-jā
ōōg'-ōō
ōō'h
ōōhān'
ōō'h-gān-DLōō-wōō

Exclamation of disdain
Wind
Shoulder blade
Teeth
Us
Matches

ōō'h-gān-kāss
ōō'nā
ōō'nā-tōō-tsū'gū-yī
ōō'h-cig-yū'-dī
ōō'sz'

Matches
Gun
Ramrod
Twins
Soap

Q.

Quā'
Qūādt

Sign, badge
Trout

Quān
Quān

Smallpox
Tribe

S.

Sā
Sāc-ē-hī
Sā-gūn'
Sā-nū'h-āt
Sē'
Sē'
Sēc
Sē''w
Shā' (falling inflection)
Shā' (rising inflection)
Shā-gāc
Shāg-sā'-nī
Shā'h
Shān
Shā-shōō'h
Shāt
Shāt-k
Shāt-kūts'-kōō
Shā-wūt
Shā'-yī
Shā-yū-dī-hān
Shē
Shē
Shēch

Name
Oolican oil
To-morrow
South wind
Voice
Daughter, doll
Belt, girdle
Rain
Mountain
Women
Valley
Girls
Wild English currants
Old man, or woman
Rattle
Horns
Maiden
Girl (small)
Woman
Young spruce tree
Plenty, many
Blood
Branches of trees
Female of animals

Shē-dtūn-i
Shē-yā'-nā
Shī
Shī-szati
Shī-szk
Shōō'-gā-nū'h
Shōō'-qu
Shōō-wōō
Shū
Shū-cē-ūt
Shū-che
Shū-cū-dlēēn
Shū-dā'-dtan
Shū-dā-ūt
Shū-gōōn
Shū-hā-wōō'
Shū'h
Shū-nū-hwā'-yī
Shūt
Shūt'h
Shūt-yāt
Si-ādt'-i
Sīdt'

Branches of spruce trees
Anchor
Song
Song leader
Raw (meat or fish)
End
Strawberries
Half
Head
Dancing headdress
Swamp
Skein of yarn
Headdress of feathers
Fascinator
Ancestors, origin
Hair (of head)
Spoon
Axe
Wife
Elder sister (female speaking)
Pillow
Cold
Glacier

SI-gā'h-i
SI-gōō'-wōō
Sōōk
Stā-dts'-gōō
Sūch-ōō-ti
Sū-cōō-nān
Sū-dā-ūt
Sū-gōō'
Gwūtł
Sūks
Sūn-cāt
SzāCH^{oo}
SzāDL
Szāg
Szāk
Szāk-tōō-nēqu
Szāsz
Szātł'

Sad, sorrowful
Beautiful, joyous
Grass
Shawl
Handle
Bread
Muffler, neckwear
Pleasure
Arrow
Bow
Leather buckles
Hat
Tear
Bullhead
Bone
Rheumatism
Waltz, dance
Master

Szau
Szā'-w'hān-i
Szē
Szē
Szē
Szēh
Szāk
Szēk-dā-cāt
Szē-nā
Sziğ'
Szisā-hīt
Szōō
Szōōc
Szōōsz-ūn-ni
Szōō-tē
SzūCH
Szū-CHwā-dā
Szū-guāt

Crab
Tree moss, yellow
Clay
Eyebrows
Black bear
Dust, dirt
Smoke
Pipe
Lamp
Dish, bowl, or plate
Tent
Green
Barnacles (large)
Pine cones
Jade
Star fish
Wicker basket
Brown, bark of tree

T.

Tādł
Tāg'
Tāg'
Tāg'
Tā'-g'ā
Tā-gā-yū't-gi
Tā-g'ūDL
Tāhl'
Tān'
Tān'
Tā-qu
Tāt'
Tāt'-yēn'
Tau
Tē'
Tē'
Tē'
Tē'DL
Tēdt'
Tēhl'
Tēt'
Tēt-gē-chūhl-g'i
Tē'-yā
Tī' (rising inflection)
Tī' (falling inflection)
Tīg'
Tīn-ā
Tī-qu
Tlā
Tlā-cū-tūnc'
Tlā-dōō-shōō
Tlā dū-hēn'
Tlāg'
Tlāg'
Tlāg'-jin-cāt-kā
Tlāgōō'

Obesity
Snail
Heart
Bite
Mosquitoes
Gnat
Needle
Large pan
Sea lion
Family (totemic)
Winter, year
Night
Midnight
Stealing
Stove
Patch
Cedar bark
Dog salmon
Vein, artery, pulse
Shoes
Waves
Sponge
Chisel
Garden
Fat of mammals
Rope
Ancient copper shield
Sensitive, touchy
Mother
Huckleberries (red)
Six
Once
One
No
One hundred
Legend

Tlā'h-đtā'-su'
Tlā-hlōō'
Tlā-kā
Tlā-nū'h
Tlā'-nū'h-kā'
Tlāq
Tlā'qu
Tlā'-quā'-ha-gōō
Tlūg-gā
Tōō
Tōōch'
Tōō-dū-CHū'-qu
Tōō-hā' yī
Tōō-hā'-yī-yūt'-gī
Tōōhl'-g'ōō
Tōō-hlū-ān
Tōōk-hl
Tōō-kū-tāhl'
Tōō-nūh-kā-yū-tēn
Tōōn'-ūt
Tōō-ōōCH-szāt
Tōōsz'
Tōō-tūn'
Tōō-wā'-ūt-sū-gōō'
Tōō-wōō'
Tōō-wōō-nē'qu
Tsā'
Tsā' hī'
Tsāg'
Tū'
Tū-hā'-yī-ē-tī
Tūk'hł
Tūs'
Tūt-gē'
Tū-tōōc
Tū-wā'

Nothing
Butterfly
Twenty, score
Alone
One man
Quick, hurry
Salmon, berries
Indian red
One by one, one to each
Deer tallow
Ants
Basket with cover
Nail or nails
Tacks
Auger
Kindness, mercy
Cartilage
Trousers, drawers
Mirror
Sensitive, touchy
Bugle, trumpet, cornet
Shark
Will, trust
Covetous, to want
Mind, will
Sorrow
Seal (hair)
Seal oil
Mittens, gloves
Sleep
Nail prints
Hammer
Thread, sinew
Yesterday
Cave
Goat

U.

Ū'
Ū'
Ū'
Ū-cōōhl'-hādł
Ū'-dā
Ū'dā
Ū-dā-cū'

That (demonstrative
pronoun)
It
Its
Fear
Over there (adverb)
On the outside
On the outside

Ū-dān'
Ū'-DLā'h'
Ū-DLōōn
Ūg'
Ū'h'
Ū-hā'
Ū-hā'-cōō-dū-yūdt'
Ū-h-ē-ti

Around, surrounding
Dance
Hunting
At that place
My, or mine
Paddle
Oars
My seat

Uhl-kä'	Gambling
U' hoō	Among
Ū-ŋ'	After
Ū-nä'	On the point of a sharp-pointed instrument
Ū-nūhl-sēn'	Neuralgia
Ū-sau	Incantation of an Indian doctor
Ūs-gā-wōō'	Seine fishing
Ūsh-cōō-dū-dtūch'ä	Swimming
Ūsh-cōōhl-djēdtä	Ball playing
Ūsh-cōōhl-sz'is'-ä	Sailing (for pleasure)
Ūsh cōōhl-yūt'	Playing, romping
Ūsh-cōōs-kōō'h'-ä	Running (for pleasure)
Ūt	Thing
Ūt-chūsh-ti	Leather
Ūt'-cōō'-dä-kä'	Signaling (m a k i n g signs)
Ūt-cū-gāhl-ti'	Crumbs
Ūt-cū 'hōōdt'-i	Chips
Ūt-cū-yā'h-tū'-gōō	Shavings
Ūt-dä-yi'	Birch

Ūt-dū'-hlē	Weight
Ūt-g'ē-yūts-g'ōō oō	Child
Ūt-gi-tān'-gōō	Cunning, cute
Ūt-gōō-wōō'	Stump of tree
Ūt-gū-dēg'-i	Cork, stopper
Ūt-gū-ū-hēn	Faith, belief
Ūt-gūts'-gōō	Child
Ūt-hä-dē	Root of tree
Ūt'-hlōō-gū'	The cause of war
Ūt'-hū'	Food
Ūt'-hū-dä-cū-hīt'-i	Restaurant, hotel
Ū-tlē	Mamma
Ūt-shi'	Songs, singing
Ūt-shōōk	Laughter
Ūt-shū-gōōn'-i'	Tools, implements
Ūt'-sū'-ē'	Cook, to
Ūt-szēk'-sz	Smoking
Ūt-yū-nāqu'-ōō	Bait
Ūt-wōōs-cōō'	Knowledge
Ū-yū-cū-dāu	Rain and snow, with wind

W.

Wä'	That (demonstrative pronoun)
Wä'-dtä	That one
Wä-ē'	You, thou
Wä-k'	Eyes
Wä-k-dä'-nä	Eyeglasses
Wä-k-yic	In the center
Wä-nä	Chalk
Wäsž'	Lice
Wät'	Fathom
Wi'-yū'h'-sū?	How much worth?
Wōō'	Father-in-law
Wōōch-yū'h	Equal
Wōōch-yū'h-dū-ti'	Suit of clothes
Wōō-dū-nāk	Burial dance
Wōōhl'	Hole

Wōōhl-sū'	Rest
Wōōn'	Maggot
Wōōsh-cä-dä'	One on top of another
Wōōsh-dū-yēn'	Facing
Wōōsh-gā-dä	Opposite one another
Wōōsh-säg'	Exchange
Wōōt	Inner bark of tree
Wōō-tōō'	In the chest
Wūn	Selvedge
Wūn'-dä	Sidewise
Wūn-yē-nū'h	Secretly
Wūsh-cū'	Cheek
Wūsh-tōō'	Inside the cheek
Wūs-wōōs	Cow (Chinook)
Wūsž'	Brush, rod
Wū-tsich	Elk

Y.

Yä'	This (demonstrative pronoun)
Yäc'	Indian doctor's spirit
Yäc	Mussels
Yä-cō-dū'hl	Heavy
Yä-cō-gānk	It is small (inanimate object)
Yä-cō-wūt	Long measure
Yä-cō-wūtl	Short measure
Yä'dōō	Here it is
Yä-di'	Price
Yä-dl	Elderberries
Yä'-dū'h'	Hence, from here
Yä'-gōō-gēn-q	Small
Yä-g'ūdt's'	Sharp
Yähl	Raven
Yä-i	Whale
Yä'-ji-nē	Work
Yäk-gwät-tzän	Shallow water
Yä-kōōs gē'	Wisdom
Yäk-sē-gānk	It is small (animate object)
Yän'	Hunger, famine
Yä-nä-yi'	Enemy, foes

Yä'-nū-ät	Wild celery
Yä'-nū'h	This way
Yä-qu	Canoe
Yä-qū-nū'-hum	Fasting
Yäs'	Fall, autumn
Yät	Here (adv.)
Yau	Herring
Yē-dūt	To-day
Yēs	Scraper
Yēs'	New
Yēt'	Son
Yē-ūt	Bedstead
Yē-whän'	You, ye
Yin-dä	Downward
Yōō'	Stomach
Yōōch'-dj	Sea otter
Yū'	Face
Yū-än-cū-ū	Earthquake
Yū-au'	Brooch
Yū-cū-ōōdt'	Buttons
Yūc'-yē	Day, daytime
Yūc'-yē-ūt'-ha-yi'	Dinner
Yū-di-qū	Rudder
Yū-dōō	Beyond

Yü'-dōō-ü	Over there	Yün	Hemlock
Yü'-dū-qū	Lad (growing)	Yün'	Shore
Yü'-dōō-ǵuāts'-gōō	Boy (small)	Yün-cūt-ōō-wōō-dā	High tide
Yü'-dūhl'-y'	Heavy	Yün'-dā	Shoreward
Yu-g'ā'	Good, all right	Yü-nēqn'	It hurts, he is sick
Yü-gā'	Great	Yün-ōō-wū'-hlä	Low tide
Yü'-gā'-yi	Large	Yün-shōō-cū'	Camping places
Yü'-gōō'-dtsä	Pincers	Yun wät	Elderly people
Yü'-guā'-nä	Towel	Yüt	Child
Yü'-ǵü-tūnc'	Talk, language	Yüt gi	Shingles
Yü'-h-cä-wū-dä-yi-hēn'	River	Yü-tōō-tūnc'	Think
Yü-kü'	Speech, language	Yü-wōō'hl-ät	Steer
Yü-kü-ti	Vile language, blasphem- my	Yü-yüdl-i	Long

CHAPTER XI.

THE EDUCATIONAL SYSTEM OF SWEDEN.

[Abridged from a pamphlet, *Education in Sweden*, published in connection with the Swedish educational exhibit at the Louisiana Purchase Exposition, and furnished to this Office through the courtesy of N. G. W. Lagerstedt, royal commissioner for Sweden to the Exposition.]

The Kingdom of Sweden occupies the eastern and larger section of the Scandinavian peninsula, situated in northwestern Europe. The western and smaller section of the peninsula consists of the kingdom of Norway, which is politically united with Sweden under one monarch. Of the total area of the united Kingdoms (about 300,000 square miles) 172,000 square miles, or approximately 58 per cent, belong to Sweden. Of their total population (about 7,500,000) 5,250,000, or about 70 per cent, are resident in Sweden.

According to vital statistics, the mortality is in Sweden lower and the expectation of life higher than in any other European and probably also any extra-European country.

Sweden exhibits a peculiar mixture of aristocratic and democratic tendencies, of which the latter have the ascendancy in our day here, as in other nations. Of social movements in modern Sweden it may be mentioned that our people have most successfully waged war against the abuse of intoxicating liquors, which struggle has attracted great attention also in other countries.

By the wealth of water power of the country, as well as by the great variety of its natural products, Sweden seems to be intended to play an important part in the industrial work of the European nations.

The close connection between education and the church is peculiar to Sweden. As in other respects, so in this, too, the history of Sweden defies theoretical calculations, and of the unfavorable consequences to be prophesied at first sight from such a connection as this only few traces are visible.

Thus church and school in Sweden both come under the ecclesiastical department. Legislation in their interest pertains to the Government and the Riksdag in common, but reglementary ordinances, etc., are issued, according to the constitution, by the Government alone (as a branch of the King's "economical legislation"). The practice has, however, more and more come into vogue for the Government to invite the Riksdag to decide conjointly with it even in these minor questions, and now no alteration of any great importance is carried through without the consent of the Riksdag. Under the ecclesiastical department the diocesan boards (bishop and chapter) have the superintendence of all, both lower and higher, public schools in the diocese. This applies also in part to private schools and institutions, especially such as enjoy a State grant.

The cost of public education in Sweden for 1895 and 1900 is calculated as follows, by E. Arosenius.^a

	In 1895.	In 1900.
Common school education.....	\$4,395,200	\$6,996,660
Secondary schools for boys and girls	1,608,000	1,705,820
The universities and high schools	388,600	542,700
Technical education	246,560	254,332
Total.....	6,638,360	9,469,512

^a Reduced to U. S. money on the basis of a Swedish crown=26.8 cents.—Ed.

Thus, during this period of five years there has been a considerable increase in the expenditure for education. The total cost per inhabitant amounted in 1895 to \$1.35, but in 1900 to \$1.84; hence an augmentation of 37 per cent. It should be noted that the cost of professional schools, such as military academies, navigation schools, agricultural and commercial schools, etc., is not included in the above figures.

Of the cost for public education the State pays about 38 per cent, while the school districts, communities, and county councils grant 54 per cent. The remaining 8 per cent is derived from the funds of the schools themselves, from term fees, etc.

1. POPULAR EDUCATION.

During the nineteenth century the necessity of an organization of the agencies of popular education, as well as of making common schools compulsory, was clearly perceived. After several decades of strife the latter principle was proclaimed by the first common school statute of 1842. It has been the central effort of the half century passed since then to realize the principles thus advanced as aims of the future. From the early days of compulsory common schools, the vivid interest and zealous labors of Count T. Rudenschöld deserve a place in the grateful memory of the Swedish people. It was mainly due to his influence that in the Riksdag of 1856-1858 a further comprehensive measure was taken, the carrying out of which was later energetically promoted, especially by F. F. Carlson, ecclesiastical minister in 1863-1870 and 1875-1878. The common school statutes now in operation are of December 10, 1897.

The common schools in Sweden are primarily the concern of the parish. Nevertheless they receive considerable assistance from the State and are under the superintendence of state and ecclesiastical authorities. Every parish constitutes a school district, the legislative authority of which is vested in the church assembly.

TABLE 1.—*The common schools in Sweden.*

Year.	Common schools (see below).					Whereof ambulatory (see p. 771).				Per cent ambulatory.
	Higher common schools.	Common schools.	Minor common schools.	Infant schools.	Total.	Common schools.	Minor common schools.	Infant schools.	Total.	
1876	12	3,749	770	4,239	8,770	962	301	2,197	3,460	39.3
1900	16	4,989	1,778	5,198	11,981	620	722	1,278	2,620	21.9

The school board performs the functions of preparatory and executive administration; it consists of the rector, who is ex officio president, and of at least four other members (male or female), elected by the church assembly. Once at least during the school year the president of the school board is bound to summon the teaching staff to a conference concerning the interests of the common school in his district.

There must be at least one common school in every district. When possible, the school ought to be divided into two departments, viz., the infant school for new beginners and the common school proper for more advanced pupils. For those who have passed through the complete course at the common school, proper arrangements are made in many places for free continuation courses.

These courses have diverse names and organizations. For pupils who have been through the common school and entered some trade, a so-called continuation school is arranged. This school provides for a yearly instruction of at least 180 hours, distributed on certain evenings of the week, or more centered within one or two short terms. Pupils unengaged in practical work may, on leaving the common school,

continue in the higher division of that school, where extended instruction is afforded. Parallel to this higher division are also the so-called higher common schools, of which, however, only a few exist. They are independent institutions of older date than the other continuation courses.

Besides these regular schools, there are others—a sort of provisional institution. When certain parts of a school district are so remote that the children belonging to it can not readily avail themselves of the common school, it is allowable to establish in its place minor common schools with a weaker teaching staff and a more restricted course.

Common school inspection.—The immediate inspection of the common schools in a school district devolves on the school board. With the consent of the church assembly the board may elect for its assistance a requisite number of head teachers and a communal common school inspector for the district. The diocesan boards, as ranging above school boards, superintend, each within its district, the conduct and development of institutions designed for popular instruction.

On behalf of the State, such inspection and control is further performed by its common school inspectors. These are appointed for a limited time (six years) by the Government. They are at present 46 in number, and have each a greater or smaller district assigned to them. If the inspector finds defects in the school matters of his district, he reports the case to the school board. If this leads to no result, he may further report to the diocesan board. When a new common school building is to be erected, he should express his views regarding its location as well as the suitability of its rooms and playground.

Teachers at common schools are either common school or infant school teachers (see above, under "Schools"). The former are partly male and partly female, the latter almost exclusively female. Male and female teachers have about the same rights and duties.

The competency of common school teachers is determined by passing an examination at some State training college for common school teachers. In Stockholm, where infant school classes are not regarded as distinct schools, instruction is imparted in them exclusively by female teachers with this higher certificate of study. For an appointment as infant school teacher, graduation at a training college established for that purpose is required as a rule. In the so-called exercise subjects, i. e., drawing, singing, gymnastics, gardening, and sloyd, instruction is sometimes given by specially appointed teachers, but as a rule these subjects are taught by common school teachers.

TABLE 2.—*Number of teachers and pupils in the common schools.^a*

Year.	Popula- tion.	Teachers.	Teachers per 10,000 inhabit- ants.	Teachers.		Whereof in the common schools. ^b		Pupils.	
				Men.	Women.	Men.	Women.	Total.	To each teacher.
1876.....	4,407,000	9,627	21.8	4,926	4,701	3,648	592	634,400	65.9
1900.....	5,117,000	16,630	32.5	5,717	10,913	4,922	2,649	741,959	44.6

^a Common schools of every kind, see Table 1.

^b In the so-called common schools proper, see Table 1. Teachers in exercise subjects are included in the preceding column, but not here; the number of such teachers in 1900 was 1,006, whereof 350 were men and 656 women.

The examinations for common school teachers can be passed only at the training colleges for common school teachers. The number of such colleges is at the present time 13, viz, 7 for male, and 6 for female students. To every training college belongs a practical school (Öfningsskola), which must contain an "infant school

department," and, where practicable, also a "higher division of the common school," or a "continuation school."

With respect to qualification, salaries, and pensions, training college teachers rank on the whole with public secondary school teachers; but those at practice schools with those at common schools.

To enter a training college the candidate must be 16 years old, and show on examination that he or she has acquired a tolerably complete common school education. The instruction is free. To poor and clever pupils who have shown commendable industry and good behavior, scholarships (the maximum \$40 per annum) are awarded.

The training college course extends over four years. Of the total number of teaching hours 13.8 per cent are allotted to instruction in the Swedish language, 13.2 per cent to religion. Of the remaining subjects, mathematics, history, and geography each take up 9.2 per cent; pedagogics and methodics, 7.9 per cent; natural science, 7.2 per cent, and exercises in the practice of teaching, 6.6 per cent. To these must be added copywriting, with 2 per cent; drawing, with 5.9 per cent; music and singing, with 7.9 per cent; gymnastics, with 7.9 per cent; sloyd, with 7.2 per cent, and gardening and planting, with 2 per cent.

The examination for infant school teachers takes place either at the State training colleges for common school teachers or in special infant school teachers' training colleges. At the State training colleges it may be passed by those who have gone through the first two classes of the training college and have obtained a certificate in religion, Swedish, arithmetic and writing, pedagogics and methodics. The examination here consists of a practical trial in the infant school department of the practice school. A special training college for infant school teachers can be established by the county council, the school district, or by private persons. It must be attached to an infant school. The course of instruction extends over eight months at least, divided into two terms. The final examination, which can not be passed before the age of 18 (and as a rule not after 30), shall take place under Government control.

At every common school there must be at least one male or female teacher in ordinary. This post can only be applied for by a person who is qualified as a common school teacher. The candidate's application is examined by the school board, which can call in one or more of the candidates to show his ability, and then nominates three of them ranking according to merit. The election takes place at the church assembly.

A permanent common school teacher can not be dismissed, unless he has shown lack of ability or carelessness in the execution of his duties, or has misconducted himself to such an extent that he ought not to be retained any longer. In such a case the school board must officially warn him; but if the warning prove ineffectual, then the board can dismiss the culprit from his appointment. After the warning and dismissal, the teacher can appeal to the diocesan board, and, last of all, to the Government.

Nonpermanent teachers are of four kinds, viz, supernumeraries, who teach at common schools and are qualified as teachers in ordinary; assistants, who also teach at common schools, but lack the regular qualification; minor common school or infant school teachers, who are only required to possess qualifications for the infant schools; and exercise masters (i. e., special teachers). Nonpermanent teachers are accepted by the board on conditions mutually agreed to, for a definite time or until further notice.

The salaries for common school teachers in ordinary are, in the first grade, at least \$188; in the second, at least \$214; in the third, at least \$241, and in the fourth, at least \$268, with an advance from the first to the second, the third, and the fourth grades after five, ten, and fifteen years' service, respectively. To these must be added

residence and wood for fuel (or a money compensation in lieu of it). This salary brings with it the obligation to teach during eight months of the year. Every additional month's teaching is paid for by an eighth part of the teacher's ordinary cash salary. In addition, a teacher in a continuation school for one hundred and eighty hours a year enjoys a special salary of \$40. For teaching sloyd the salary is fixed at the discretion of the school district.

The minimum remunerations quoted above are the same for teachers of either sex. In towns, as also in many places in the country, the school districts usually assign considerably higher salaries, in which case male teachers, as a rule, are paid more than female.

Teachers in ordinary are entitled to a pension of \$200 from the Common School Teachers' Pension Institute, to which the school district contributes an annual subscription. On the other hand, teachers personally subscribe to the widows and orphans' fund, from which those left behind draw a pension. Also nonpermanent teachers and infant school teachers are now entitled to a pension derived from an "Institution of relief for the aged," established for that purpose.

Pupils.—All parents and guardians are bound to see that their children receive instruction. It is the duty of the school board to attend to the fulfillment of this obligation. The school age is reckoned from the calendar year in which the child reaches the age of 7 till the year in which it reaches 14. Children, however, are exempt from liability to attend common school classes if they receive instruction elsewhere on a par, in accuracy and extent, with that of a common school.

As already mentioned, common schools are divided into infant schools and common schools proper. In the former the course of studies is calculated, according to the official plan for two years, in the common school proper for four years; consequently the compulsory school period is fixed by the school board in most districts at six years.

Children deficient in required knowledge after passing through the common school are still, in so far as they possess normal capacity, held to attend school, even if they have passed beyond the limit of the so-called school age. In certain cases, however, exemption from this rule is made in the way mentioned below as "minimum curriculum."

No children must be prevented by other employment from going through the infant and common school proper, nor by the poverty or unwillingness of their parents or guardians either.

Employers who make use of children's labor must so arrange their work as not to prevent the latter from receiving the prescribed instruction. When parents or guardians lack the means of paying for their children's clothes and maintenance at school, they should be helped by the poor law board. In the event of parents or guardians neglecting to keep their children at school, the children can be sent away from home and intrusted to the care of others, the expenses of their support being exacted from the parents or guardians.

Course of study.—The plan of instruction is fixed for every district by its school board under the guidance of a "normal plan" drawn up by the ecclesiastical department. The rule is that the annual period of instruction for every school shall extend over eight months (thirty-four and one-half weeks) at least.

Every child, however, does not receive so long a period of instruction. When local conditions or want of means prevent the establishment of ordinary schools the instruction of children may be provisionally provided for by "ambulatory schools." In many instances it thus happens that a school district is divided into two or more wards, between which the master moves. The number of wards is restricted as much as possible, so that the teaching in every ward may be annually extended in point of time. The number of ambulatory schools is decreasing. (See Table 1, p. 768.)

But even at stationary schools the time of study can be divided between different groups of children. In many of them arrangements are made for having different divisions of children taught at different seasons of the year. In some the school year is so divided that different divisions of children are instructed on different days of the week. Thus it follows that a very large percentage of common school children only get about four months of instruction altogether annually.

With regard to the number of lesson hours a week, the law prescribes that they must in no case exceed thirty-six.

The subjects in which instruction is to be imparted are laid down in the common school statute. With regard to the range of instruction in every particular subject, directions are given in the above-mentioned normal plan, according to which the course followed in infant and common schools proper embraces:

In religion: Stories from the Old and New Testament, Luther's Brief Catechism with its accepted exposition, select hymnal verses (50-80), perusal of certain books of the New Testament. In Swedish: Fluent and accurate reading, exercise in understanding and orally accounting for what has been read, fairly correct orthography, exercise in rendering stories in writing and giving simple descriptions, acquaintance with such parts of grammar as are necessary for following the other instructions in Swedish, proficiency in handwriting. In arithmetic: The four rules in integers and fractions with their application to practical problems of easy comprehension. In geometry: Drawing, describing, and measuring of lines, angles, triangles, squares, and circles, together with description and measurement of the more simple solid figures. In geography: Main outlines of physical geography, somewhat minute geography of Sweden, a brief survey of the geography of other civilized countries. In history: Selected stories from Swedish history. In natural science: Description of common natural objects; construction of the human body, its functions and preservation; instruction on the most important natural phenomena, and the celestial bodies.

Besides these subjects the instruction includes: Drawing: Simple free-hand drawing and geometrical drawing. Singing: Tunes of hymns and suitable songs, exercises in harmony and tempo. Gymnastics: General gymnastics, exercises in marching and jumping; also, where opportunities admit, simple gymnastics with apparatus. Gardening: Instruction in the cultivation of the commonest flowers and vegetables, raising of shrubs and saplings, and their improvement by grafting and pruning.

The above-mentioned subjects of instruction are obligatory. Optional subjects are: For boys, boys' sloyd; for girls, girls' sloyd and domestic economy. Where the latter is taught a school kitchen is attached to the school. (See below.) These two optional subjects have become very popular during the last few years. This is particularly the case with sloyd, to which a special article is devoted below.

The plan of instruction in continuation schools comprises, among other courses, the following: In religion: Reading of an entire book of the Bible or a portion of such, and Luther's Brief Catechism. In Swedish: Composition (stories, descriptions, and the commoner kinds of business correspondence) and oral exercises. In arithmetic: Exercises in applying to mixed problems of a practical nature the four rules in integers and fractions, and the outlines of bookkeeping. In geometry: Drawing, describing, and measuring polygons and ellipses and also polygonal and round bodies, etc. In drawing: Drawing exercises in connection with geometrical instruction and sloyd. In history: Further study of Swedish history. In natural science: Description of minerals, varieties of rocks and earths, and also a portion of the science of natural phenomena.

For the higher division of the common schools and the higher common schools no special courses of instruction are laid down in the official plan. The instruction in this highest grade of common schools is for that reason very different at different places. According to available information, it embraces among other courses the following: In Swedish: Reading of selected pieces from the classic literature of

Sweden, together with brief notices on the authors, essay writing, outlines of Swedish grammar. In arithmetic: Bookkeeping, introduction to algebra, and easier equations. In geometry: Calculations, constructions, and demonstrations (corresponding to the first three books of Euclid). In geography: Further exposition of the scenery, the mercantile and social conditions of Sweden; commerce of the world and its highways; climatic conditions and the distribution of the plant and animal kingdom in different quarters of the globe. In history: The most important events in the history of the world, with especial stress on the evolution of civilization and with reference to the connection of Swedish history with the outside world; main outlines of the Swedish constitution. In natural science: The most important parts of physics and chemistry as bearing on everyday life; hygiene. Also instruction in sloyd and domestic economy. In various places instruction is given in one foreign language (German or English).

From the law requiring every child to pass through the entire curriculum laid down for the common schools of the district before being entitled to a complete certificate one exception is made. Pupils who are prevented by poverty from availing themselves of the instruction for the number of years properly required may, "where circumstances demand it," be allowed to leave school if they have passed a certain "minimum."

Among common school subjects gymnastics—in Sweden according to Ling's system—has for its chief aim the physical development of the children. This is partly the case also with regard to the teaching of gardening and tree planting, of sloyd for boys, and of domestic economy. For the same purpose various social-hygienic arrangements, aside from those provided for by the law, have been introduced in several school districts, more especially in the larger towns. Among these may be mentioned the distribution of food to children, the arrangements for school baths, workrooms, vacation colonies, etc.

School kitchens.—In Stockholm the providing of food to children is connected with the school kitchens in such a way that the food prepared by the schoolgirls in the forenoon serves for dinners to such pupils as would not get a proper meal at home. In some places poor children get their meals quite free; in several others they themselves have to contribute about a penny toward the cost. The school kitchens, the earliest of which in Sweden were established in 1882 by the Lars Hierta's memorial foundation on the initiative of Mrs. Anna Hierta-Retzius, have proved serviceable.

School baths.—For a long series of years baths and swimming lessons in the summer months have been arranged for common school pupils, both boys and girls, in the largest towns in Sweden. Recently school baths have been arranged even in winter. Special bathrooms have been erected in certain schools, and the children there can get a warm bath every third or fourth week. Making use of such baths is general, though voluntary. This regulation has proved highly beneficial to the children's cleanliness and health.

Vacation colonies.—In many of the larger towns it has become customary during the last few years to send poor children who are specially delicate or weak into vacation colonies for the summer, there to regain health and strength. These colonies, which are kept in the country, usually in the vicinity of woods and water, are generally superintended by male or female teachers. They were started in Stockholm in 1884, and between 1885 and 1900 356 colonies, of altogether 8,751 children, have been sent from that city, exclusive of similar colonies provided for by certain industrial companies for children belonging to their workmen or by others. Every colony consisted of about 27 children on an average. The average number of days during which each child was kept amounted to 60.2, and the daily total cost per child came to about 15 cents. The effects of such colonies on the children's health have been eminently satisfactory.

Local systems.—The foregoing account applies to the actual state of things in gen-

eral. For certain places, however, the character is slightly different. In Stockholm and Gottenborg, for instance, matters pertaining to the common schools are not managed by the church assemblies, but by the town council.

Illiteracy.—With regard to the results of the common school teaching it may be mentioned that in Sweden at the present day practically all the young men enrolled as conscripts are able to read, the slight exception of about 1 per 1,000 arising from a few Finns from the extreme north.

Of course the last word is not said in merely stating that reading is a general accomplishment. It will be found that out of all the conscripts in 1900, 69.8 per cent could read fluently and 30.2 per cent fairly well. There is thus still a large field for progress even with regard to such an elementary subject as reading. That such progress is being made is proved from the fact that in 1875 only 52.4 per cent of the military received certificates of good skill, but, on the other hand, in 1900, as we have just mentioned, 69.8 per cent.

The expenses of common schools are not met by the pupils, but entirely by public grants.

The burden of these expenses falls partly upon the school districts and partly on the State. The school district is bound to erect and support school buildings, provide them with furniture and the materials of instruction, and attend to heating and cleaning; moreover, it must provide the teacher with the statutory allowances in kind and a salary as laid down by law; it also is bound to contribute a yearly fee toward pensioning him. As far as salaries are concerned, it is to be observed, however, that the district generally is reimbursed by the State with two-thirds of its outlay for salaries. Moreover, the State contributes toward establishing pensions a sum which at the present time amounts to about \$150,000, and it defrays the expenses for the training colleges for common school teachers and also for the inspection of common schools. In the total expenditure for popular instruction, the higher common schools and the schools for the abnormal, the State contributes about 30 per cent. The amount of donations for common school purposes amounted in 1898 to somewhat above \$1,500,000.

TABLE 3.—*Expenditure for the common schools. a*

Year.	Popula- tion.	Total ex- penditure.	Per inhabit- ant.	Heads of expenditure.			
				Salaries.	Houses.	Material.	Other.
1876.....	4,407,000	\$2,052,458	\$0.47	\$1,366,058	\$440,588	\$51,653	\$195,159
1900.....	5,117,000	6,190,197	1.21	3,517,262	1,562,282	90,680	1,019,973

^a Including training colleges for teachers, people's high schools, schools for the abnormal, and also grants for pensions, the total expenditure amounted in 1900 to nearly \$7,000,000 (see p. 767.)

EDUCATIONAL SLOYD.

Sweden takes an important part in the movement which, directed against exclusive brain work at school, strives to make systematically arranged manual work an important element of rational education. A Swedish educational sloyd system has been devised and worked out, and afterwards adopted in many other countries, both in and out of Europe.

In 1877 the Riksdag voted about \$4,000 for the promotion of sloyd instruction for boys. At the time there were some 80 schools where such instruction was given, and each school received an annual grant of \$20, whereas the number of classes which during 1900 were in receipt of such grant amounted to 3,490. This instruction is not, as a rule, compulsory, nor is it of necessity that a system regulated in every detail be adopted. The total of the grant paid by the Government to those schools where sloyd instruction is imparted to boys was in 1900 about \$70,000.

By "Swedish educational sloyd" is meant the system of instruction and the method worked out at the Nääs Slöjdlärareseminarium, where most of those Swedish male and female teachers who impart instruction in carpentering have received their training. Sloyd is also taught at all training colleges for male common school teachers.

The Nääs Slöjdlärareseminarium (director, Otto Salomon) was founded by August Abrahamson (1817-1898), proprietor of the Nääs estate, situated 30 kilometers from Gottenborg, and it is supported by his munificent donations. The instruction is free. Of the 3,346 students from 1875 to 1900 Sweden furnished 2,493, England 331, the United States 72, Finland 65, Norway 62, Scotland 58, Denmark 57, Netherlands 37, Russia 34, Austria 26, Germany 24, Hungary 17, Italy 16, and nineteen other countries 53.

Sloyd instruction for educational purposes is in Sweden taught chiefly to boys from 10 to 14 years of age, and that is the reason why at Nääs the sloyd instruction has been limited to sloyd carpentry, as being the most suitable for pupils of that age. In some schools, however, cardboard and metal sloyd, turnery and wood carving are also taught. The educational sloyd claims its place at the schools as an element of general education. Its object is not to train cabinetmakers or other artisans. Its aim is, on the other hand, the moral, intellectual, and physical development of the pupil by teaching him orderliness, attentiveness, and perseverance, by training his eye to see better and his hand to work better, and, above all, by giving, together with gymnastics, a healthy counterbalance against one-sided bookwork. "Quality, not quantity," is the motto of pedagogical sloyd, for which reason it does not require of children many and large pieces of work, but the greatest possible accuracy in arriving at a result, which is gained by beginning with comparatively simple models and by only gradually, in progressive order, passing on or to more complex work.

With a good form from an esthetical point of view the objects made must unite a practical purpose, and thus in order to strengthen the bond between the home and the school hardly any articles but those likely to prove useful, either to the children themselves or to their parents, are, as a rule, produced. Articles of pure luxury are altogether excluded.

WORKSHOPS FOR CHILDREN.

On April 4, 1886, the board of the Institution Lars Hierta's memorial fund, at the initiative of one of its members, Mrs. Anna Hierta-Retzius, voted means for the establishment of workshops for children; i. e., "a kind of day schools, where an opportunity is given to poor children during their leisure hours to occupy themselves in a useful way, learn practical work and various trades."

The first workshop was opened on January 25, 1887, in the parish of Adolf Fredrik, at Stockholm. Similar institutions have been started in the space of a few years in all the parishes of the capital, each with a special board to organize the instruction and superintend the work, etc. A central committee, to which every board elects one member, manages the common concerns, publishes annual reports, arranges classes for teachers, lends models for work, etc.

Poor children from 7 to 14 who are not looked after at home are received in the workshops on the proposal of the common school teachers and are taught there from 11 a. m. to 1 p. m. (the youngest children) and from 5 to 7 p. m. (the older ones). The former get their dinners, the latter their suppers, as a remuneration for the work. The cost for the dinner is from 2 to 3½ cents, that for the supper from four-fifths of a cent to 2 cents, per child.

The staff of teachers consists partly of voluntary, partly of paid, lady teachers and of artisans skilled in their professions. In 1902 the number of voluntary lady teachers amounted to 62 and that of paid teachers to 82.

The workshops are managed at a very small cost. They are supported by subventions from the town council and parish grants, by private gifts, and by sale of the

children's work. The income at the annual joint sale of this amounts to from \$1,300 to \$1,900. The annual grant from the town council for all the workshops of Stockholm amounts to \$6,700, that of the parishes from \$80 up to \$320 for each shop.

While the object of the sloyd pursued at the schools is chiefly a pedagogical one, the work at these shops aims more at manual skill and practical usefulness. The boys are taught brush making, fretwork, wood carving, basket work, joinery, tailoring, cobbler's work, and metal work. The girls make slippers, sew shoes, chip plaits for hats, and baskets; besides, they weave, make dresses and underclothes, etc., and also learn to mend their own garments. In the parishes of Klara and Östermalm the shops are combined with a school kitchen; in all the shops the children help in the kitchen and assist in sweeping and dusting the rooms.

The children are also allowed to take home material for sundry easy work, which they do at home and for which they are paid out of the means of the workshop; their wages are put into the post-office savings bank for them. On such home work, which is highly in demand among the children and given as an encouragement and reward only to the good and most industrious, they can earn from \$2 to \$5 a term. The average cost for each child in the workshops of Stockholm was during the first ten years \$3.67 per annum, but has somewhat increased these last years. The number of children in the 14 workshops of Stockholm is from 60 up to 225 in each.

Workshops have been started also in other Swedish towns and villages, at present reaching the number of 51. They are organized on the same principles as those of Stockholm. At their foundation they get for the first setting-up a grant of from \$200 to \$250 from the Institution Lars Hierta's memorial fund.

During the sixteen years that have elapsed since such workshops began the moral and educational value of manual training has been proved. The good results of the work have also become obvious and are generally acknowledged. In the capital alone about 1,600 of the poorest children have in these workshops during their leisure hours found a refuge where they are put to a useful occupation instead of roaming about in the streets and markets and being exposed to the temptation of begging and pilfering. The workshops, where the children, besides enjoying motherly care and education, acquire manual skill and quickness of perception and learn useful trades, have proved one of the best preventive means against the vagrancy and criminality of the young. Thousands of children, among whom many come from the worst of homes, have thus been brought into safety without having had to be taken from their parents and put into orphanages or reformatory or industrial schools.

Concerning the workshops and the activity displayed in them, minute information is imparted in a work published in 1897 by Mrs. Anna Hierta-Retzius.

EDUCATION OF DEFECTIVE AND NEGLECTED CHILDREN.

Schools for the deaf and dumb.—A statute passed on the 31st of May, 1889, puts Sweden in the forefront of European nations in respect to the education of deaf-mutes.

According to this law, the education of deaf-mutes is a public concern within the purview of the county councils, nevertheless with important assistance from the state, which also exercises a certain superintendence over it. This instruction, moreover, is obligatory. The school age is from 7, and continues for eight years from the time the pupil first enters the school. Private instruction is subjected to the control of the public school boards.

For the official education of deaf-mutes Sweden is divided into seven districts, each with its board and one school at the least. Every district determines its own detail arrangements, which admits of multifarious developments in mutual competition, productive of excellent result. The need of greater unity, however, has been

felt in certain practical questions, and to meet this need plans have been prepared by delegates from the various boards, especially touching the teaching staff, their salaries and pensions.

At every school there is a trial class of one year, where the children are examined as to whether they can be advanced to the articulation-method division, which is the main feature of the school, and implies that the pupil learns to speak, and also to read the spoken language from the lips of others. Those who can not be placed in the class for writing methods, which teaches the finger alphabet and writing, or in that for the method of signs, which embraces gestures, supplemented to a greater or less extent by writing and the finger alphabet. But even children who are taught according to the articulation method are divided into groups according to their ability of following instruction—a regulation which constitutes one of the corner stones of the Swedish organization of teaching deaf-mutes.

The Swedish deaf and dumb schools are establishments on a large scale (counting, as a rule, a hundred pupils or more), with newly erected, expensive buildings (to a total value of more than \$530,000), and excellent educational appliances. In four districts the school consists of a single building; in one district each of the three divisions of the school has its separate building, and, finally, two districts have located their different divisions in different towns. In five districts the whole school has the features of a boarding school—i. e., the pupils enjoy both board and lodging in the school itself; in one district the school is partly a day and partly a boarding school, and in one it is exclusively a day school.

The instruction is coeducational for boys and girls (a feature peculiar to the Scandinavian, German, and Anglo-American deaf and dumb school), and it is carried on during forty weeks in the year, and comprises the usual common school subjects. The boys are in addition taught sloyd, tailoring, and shoemaking; the girls, sewing, weaving, and household management, and, in one school, even cookery. Some schools teach both boys and girls gardening.

Pupils that have left the school may, as far as possible, revisit the school for a week or so every year; and at one school attempts have been made to start a continuation course for such visitors, which has succeeded well and been gratefully attended by the deaf-mutes.

Only two of the former private schools now exist, one of which takes deaf and dumb idiots that are capable of some instruction. The total number of pupils in the public and private schools amounted in 1902 to 803, 610 of whom were taught according to the articulation method, 142 according to the writing, and 49 according to the signing method. The number of classes is 112 and of teachers 111, 51 of whom are men and 60 women. There is a training college for such teachers at the Manila school in Stockholm.

There are, besides, for deaf mutes who are over age, two establishments, with a total of about 60 pupils. These establishments will gradually become unnecessary as compulsory instruction is enforced.

The cost of the instruction and support of deaf-mutes amounted in 1898 to about \$147,000. The State makes a grant of \$67 for every pupil and the county councils defray the rest. According to law, parents or guardians (or poor-law authorities) may be made to pay a yearly fee (\$13 to \$26) for each pupil; but some authorities have not availed themselves of this right.

The total number of deaf-mutes in Sweden, according to the census of 1890, amounted to 5,307, or 110.9 to every 100,000 inhabitants—on the whole, an uncommonly large figure. Of late there has even been some inconsiderable increase.

There is a little school at Venersborg for blind deaf-mutes. It is the only one of its kind in the world. The institution was opened in 1886 by Mrs. Anrep-Nordin, who continues the direction of the school. The number of pupils since the commencement amounts to 28, while the number is still 14, of which total, however,

but 6 are blind deaf-mutes, the remainder being blind, with a complication of other bodily or mental defects, some being blind idiots. The method used in the teaching of these children is the "writing method," as it is called, together with the employment of the finger alphabet, and writing with raised letters. Two of the children have shown a high degree of intelligence and have been benefited by the instruction in a marvelous way—nay, have even been taught to speak. The school home at present enjoys an annual government grant of \$1,300. The fee paid by the pupils is \$107 per year, half of which is usually provided by the respective county councils.

Schools for the blind.—In 1879 the teaching of the blind was intrusted to a special institute for the blind. Started at Stockholm, it was removed to its new building at Tomtebodavägen, in the neighborhood of the city, in 1888. But the institute alone could not take the 200 blind children of school age (from 7 to 17). Two preparatory schools were required for their preliminary instruction. One of these was established at Vexjö in 1884; the other was united to the institute, and came into operation in 1899. The preparatory schools are each capable of receiving 40 pupils, the institute at least 100. For those who have lost their sight at a more mature age there has been, since 1884, a school of arts and crafts in Kristinehamn, where the pupils receive gratuitous instruction in reading and writing, as well as in certain trades, such as brush and basket making, but must themselves defray the cost of their board. Each pupil, however, receives a contingent of the government subvention for this purpose.

By the law about institutions for the blind and a statute for them, both passed on May 29, 1896, the instruction of the blind became obligatory from the beginning of 1899. A child is received into the preparatory school at the age of 7 to be prepared, by a four years' course of instruction, for entering the institute, where its education will be continued and finished. Should such a child be of somewhat feeble intellect, it has to remain another two years in the preparatory school to finish off its studies. The subjects taught in this school are as follows: Religion, exercises in object lessons, Swedish, writing, arithmetic, singing, gymnastics, hand exercises, modeling, and needlework. Children who have satisfactorily passed the preliminary school are admitted into the institute, also children up to the age of 14 in the case of their having become blind after reaching the age of 9. For the former the period of study is six, for the latter, eight years. The subjects studied at the institute are the same as those of the preliminary school, with the addition of geometry, geography, history, natural science, handicraft (basket, brush, and rope making, joinery), music, and piano tuning. The school year, both at the preliminary schools and the institute, extends over forty weeks. For every child at either establishment the county council pays \$80 per annum, with the right of drawing contributions from parents or guardians or from the parish. There is a course of training at the institute for those desirous of becoming teachers of the blind, and such students while there enjoy stipends from the treasury. The institute receives an annual grant of \$670 to print books for the blind. Nearly all literature for the blind is now printed in Braille type. The annual expenditure of the State on the education of the blind at present amounts to about \$25,000, exclusive of grants for buildings.

Besides the above, three institutions for the adult blind are sustained by private benevolence.

At the census of 1890 the total number of the blind amounted to 3,948, 1,992 of whom were above 60 years of age. The frequency of blindness (82.5 per 100,000 inhabitants) has on the whole diminished of late years, owing to improved medical treatment.

Schools for idiots.—Idiots were the last of the abnormal children for whose education provision was made in Sweden. The first school—a private one—was opened

at Sköfde, in 1866, by Miss Emanuella Carlbeck. At the present time there are 36 institutions (all homes)—some of them schools (for children capable of instruction), others working homes (for pupils who have left school), and others, again, asylums (for those incapable of instruction). These institutions are supported by societies, county councils, and private people; moreover, the State grants \$67 for every teachable idiot in the schools, and \$270 for each pupil at the working homes. The whole number in charge at the above institutions amounts to 889; small institutions of this kind being preferred, none of them contains more than about 80 pupils. The majority of such institutions are managed by women, and these do all the teaching, except in gymnastics and wood carving, because women, owing to their gentler and more patient temperament, are considered best fitted for instructing idiots, which occupation tries these qualities.

Working homes were erected when it was found that pupils who had left the schools could not stand the humiliation of associating with workmen normally gifted. Working homes for male idiots are usually located in the country, and there the patients are employed with great success in agriculture and gardening. Under able superintendence they prove in a perfectly satisfactory way their ability to perform the rougher labors of farming and cattle tending. Homes for female idiots are generally located in towns, and the wards contribute toward their own support by weaving (in which art many attain a considerable skill), knitting, sewing, and lace making, etc.

There is an asylum on a small scale attached to nearly every school. Up to the present time, though, very little has been done in Sweden for this department of idiot management.

For providing an efficient staff of teachers for idiots a training college has been conducted in Stockholm since 1878 at the School for Feeble-minded Children, with accommodation at the present time for 8 pupils, who undergo a two years' theoretical and practical course of training. The training college is supported by the State at an annual cost of \$3,200.

The total number of idiots in Sweden, according to the census of 1890, amounted to 7,619, or 159 per each 100,000 of the population. Probably this figure is a trifle too high though. For times gone by the reports show a much smaller proportion, but they may underrate real conditions. The number of idiots of school age is about 2,000.

Working schools for disabled people.—In Gottenborg there was organized, as early as 1885, an "Association for Assistance to Disabled People." Means were collected and the school was opened on October 5 the same year. The number of pupils has, from the beginning of the school till the end of the year 1902, amounted to 195. Of these, 23 were entirely in want of one arm, 27 paralyzed in one arm in consequence of disease, the others had different bodily defects, which made it difficult for them to be engaged in any trade. The school makes a point of giving the disabled people an industrial education. Instruction is given in joinery, turning, shoemaking, basket making, brush making, and wood carving for the male pupils; linen sewing and art needlework, lettering, weaving, and stockinet knitting for the female pupils. As soon as the work is salable the pupil has hitherto received full wages; the school has only taken pay for the material and run the risk of the work not being sold. Destitute pupils are given free dinner at the school. Free baths are given, and an opportunity is afforded to the most sickly to spend six weeks in the country in summer.

In Karlskrona, on the initiative of a private person, a little school for disabled people was opened in 1886. In 1887 the Association for Assistance to Disabled People in Skane was organized, and a working school was opened in Helsingborg. In 1890 a home, intended to hold 40 pupils, was built, but this number has never as

yet been received, owing to the lack of sufficient means. In 1891 the "Society in Aid of the Deformed and Infirm" was established in Stockholm. In 1892 its working school was opened; now also a "home" for part of the pupils is connected with the same. The pupils who need orthopedic treatment receive it at the general orthopedic clinic of Stockholm.

Nothing has yet been done on the part of the State to facilitate the instruction and care of disabled people, so it is almost entirely from the neighborhood in the immediate vicinity of the schools that pupils can be received.

PEOPLE'S HIGH SCHOOLS—WORKMEN'S INSTITUTES—UNIVERSITY EXTENSION.

During the last decades, numerous efforts have been made in Sweden for the promotion of knowledge also among the adult population of the lower classes of the community, or among others who either through their trade or profession are prevented from attending the regular schools. These efforts have taken form, partly in the so-called "People's High Schools" and in the kindred "Workmen's Institutes," both of which institutions have originated on Scandinavian or Swedish ground, and partly in the so-called "University extension" movement, according to a pattern received from England. To this has of late years been added a great activity in popular public lecturing, which is being embraced with a steadily growing interest, and is arranged for by associations specially formed for the purpose.

People's high schools (Folkhögskolor) are institutions which only exist in the three kingdoms of Scandinavia and also in Finland. Their purpose is to furnish adult members, especially of the peasantry, with an education at once civil, patriotic, and practical. There are now 30 of these schools.

People's high schools are all located in the country. Most of them now have buildings of their own, with residences for the teachers and a certain number of pupils, the rest of the pupils living in adjacent houses. Gymnastic halls are provided in some schools, and are also used by the people of the neighborhood for meetings.

Most of the schools were originally private enterprises, but nearly always supported by grants from the county councils and agricultural societies, as well as the State. No special courses of instruction are fixed, and there is no examination on leaving.

Youths of 18—the average age is from 20 to 22—having passed through the national school and bringing a certificate of good conduct are received as pupils. There is no entrance examination. In 1900 the total number of pupils was 774.

The instruction given covers a period of one or two years, the first and second of which, however, greatly differ in character, so that the majority of students only go through the first course. According to the average of certain larger and older-established schools, the following subjects were studied as a first year's course during the session from November, 1897, to April, 1898, viz: Swedish language 186 hours, history 80, geography 57, politics and municipal law 56, rural economy 22, natural science and hygiene 120, arithmetic 85, geometry, land surveying, and leveling 45, bookkeeping 47, architectural drawing and drawing tools 68, writing 46, singing 46, and gymnastics 69 hours, to which may be added reading aloud literary works, discussions, assemblies, and, in some schools, sloyd.

The second year's course, which has more of a professional stamp, embraces, in addition, farming, rearing of domestic animals, and forestry. At 12 schools the second year's course is arranged on the lines of a thorough school of agriculture, with a special State grant toward defraying the costs of instruction.

The State has made grants to people's high schools since 1872. The total amount was raised by the Riksdag of 1900 from \$15,000 to \$32,000.

At the present time there are also people's high school courses for women. As already mentioned, the courses for men are held in the winter session from Novem-

ber to April. It naturally occurred to the authorities to fix on the summer for women's classes. A beginning was made at the people's high school at Hvilan in 1873, and the plan has since been more and more generally adopted. As a rule, these courses are directed by the manager of the men's school and his wife, with the assistance of the necessary number of the other teachers and of specially appointed female teachers.

The total number of female scholars in 1900 was 614. The age is generally between 18 and 20. Instruction is given in the Swedish language, history, geography, natural science, hygiene, and domestic economy, arithmetic, bookkeeping, writing, singing, and several kinds of needlework and weaving.

Workmen's institutes, located in the towns, offer to the working classes there popular lectures and opportunities for instructive reading. The first institute of the kind was established in 1880, in Stockholm by A. Nyström, M. D. The lectures at it have chiefly pertained to history and natural science. After the pattern of the Stockholm institute, others of the same kind have been organized in several other towns.

Lecture courses.—Of late years an important and steadily increasing activity has been exercised in Sweden by a great number of lecture associations of various kinds. The work has in some cases been entered upon by societies founded for other purposes, as workingmen's associations, trade unions, temperance societies, et cet.; but generally special associations have been founded for the purpose of arranging popular scientific lectures. In a marked degree this movement has of late years been promoted by the establishing of central offices procuring lecturers; by means of these offices a considerable unity and a better organization have been brought into the work. The oldest of these central offices is the one for southern Sweden at Lund (since 1898), from which in the year 1902 more than 900 lectures were ordered to be delivered by about 50 different lecturers at 75 places.

The costs for these lectures were at first defrayed by the fees of the society members and by subventions from the respective communities and county councils, but nowadays to a considerable degree also by State grants. For 1902 the Government thus disbursed a total of \$17,000 to 123 different lecture institutions, but as petitions for subvention were sent in by no less than 56 other recent associations, which, however, had to be refused for want of sufficient disposable means, the Government presented a proposal to the Riksdag to increase the annual supply to \$27,000, which also was granted. For State subventions to be granted it is enjoined that the respective associations provide as large an amount as the State, and that political and religious controversies or debates be excluded from the lectures. The interest in these lectures has been constantly increasing, but of course it is as yet manifesting itself very differently in different parts. In the thinly populated country districts there are many difficulties to be overcome.

Summer courses at the universities.—After the model of the English "university extension" movement, there has annually, since 1893, during the latter half of August, been given a course of lectures of a fortnight's duration at Upsala and Lund alternately, for people who are not able to profit regularly by academical instruction. The number of partakers has in Upsala averaged nearly 400, of whom about two-thirds were male and female common school teachers.

2. SECONDARY EDUCATION.

Under this head come the public schools for boys supported by the State, as well as the private schools of the same standing, and also the higher schools for girls, which in range of instruction closely approach the former.

PUBLIC SECONDARY SCHOOLS FOR BOYS.

Aim and number of the public secondary schools for boys.—According to the public school act of November 1, 1878, still in force, it is the object of the secondary schools to give a civic education beyond that imparted by the common schools, and also to impart that scientific knowledge which is to be further developed at the university or the higher special schools.

During the school year 1902-3 the entire number of public secondary schools as supported by the State amounted to 82. Those containing nine classes are called higher or complete secondary schools; those containing five or three classes, lower secondary schools, and those containing less than three classes, pedagogies.

During the school year 1900-1901, 36 schools had nine classes, 1 six classes, 38 five classes, 1 four classes, 2 three classes, and 1 two classes.

Of the 36 schools, 25 have both the lines, classical and modern, complete; 7 only the classical line (3 having a modern line in the sixth class), and 4 only the modern line. All, with four exceptions, have both lines in the fourth and fifth classes.

The number of students in a section of the five lower classes must not exceed 40. But as parallel sections often occur in the same class, there are higher schools with 600 or 700 students, and lower schools with 300 or 400.

All the public secondary schools are located in towns and cities.

Administration.—The public secondary schools, like most of the educational institutions of the country, come under the ecclesiastical department. Within each diocese the bishop is the superintendent (eforus) of its public schools; for schools not located in the cathedral city he appoints as his representative an inspector.

At the head of every public school there is a principal (rector), who is appointed by the Government from among the applicants for a definite term of years—usually five. Besides his duties as head of the school the principal has a certain amount of teaching to do and is responsible for the school finances.

The principal is assisted in the performance of his duties by the faculty (lärarekollegiet), consisting of the teachers of the school, presided over by the "eforus" or inspector, if he is present, otherwise by the principal. The faculty determines upon questions of teaching, school discipline, finances, etc.

Instruction.—The school year begins at the close of August and extends over 36 weeks, with a week of Easter and half a week of Whitsuntide vacation. The actual number of school weeks is thus $34\frac{1}{2}$. Hence the school year is in Sweden considerably shorter than in most other European countries. Thus it is in Denmark 43, in Prussia and Austria 42, in France 41, and in Norway $38\frac{1}{2}$ weeks.

A complete school course is calculated for nine years of work, distributed over seven classes, of which the two highest (VI and VII) cover each two years. The first class is the lowest. The four highest classes are called, respectively, the lower sixth (VI: 1), the upper sixth (VI: 2), the lower seventh (VII: 1), and the upper seventh (VII: 2).

TABLE 4.—*Time schedule for the public secondary schools.*^a

Subjects.	Lines.	I.	II.	III.	IV.	V.	VI: 1.	VI: 2.	VII: 1.	VII: 2.	Hours per week.
Religion.....	All.	3	3	3	2	2	2	2	2	2	21
Swedish.....	All.	5	5	6	4	3	2	2	2	2	31
History and geography. ^b	All.	4	5	6	4	4	3	3	3	3	35
Philosophy ^c	All.								1	1	2
Latin.....	C.				7	7	6	6	7	7	40
Greek.....	Ca.						2	2	2	2	24
German.....	Ca.	6	7	6	4	3	1	2	2	2	34
	Cb. M.	6	7	6	4	3	1	1	1	1	30
English.....	Cb.						3	3	2	2	10
	M.				6	6	3	3	3	3	24
French.....	Ca.						3	4	3	3	17
	Cb. M.					3	4	4	4	4	19
Mathematics.....	Ca.	4	5	5	5	4	3	3	3	3	35
	Cb.	4	5	5	5	4	4	4	5	5	41
	M.	4	5	5	5	4	6	6	7	7	49
Natural history ^d	Ca.	2	2	2	3	3					12
	Cb. M.	2	2	2	3	3	1	1	1	1	16
Physics.....	C.								2	2	6
	M.						2	2	3	3	10
Chemistry.....	All.						2	2	2	2	8
Penmanship.....	All.	2	2	1							5
Drawing.....	Ca.	1	1	1	1	1					5
	Cb.	1	1	1	1	1	2	2	1	1	11
	M.	1	1	1	2	2	3	3	2	2	17
Composition ^e	All.						3	3			6
Total.....	All.	27	50	30	30	30	32	32	31	31	273

^a Roman numbers denote classes. Ca=classical line A (with Greek); Cb=classical line B (without Greek); M=modern line (the classical and modern lines do not diverge till in the fourth class; and the division of the classical line takes place in Class VI: 1).

^b Special hours are given to geography in Classes I-IV, resp. 2, 2, 3, 1, and 1.

^c Psychology and logic.

^d Zoology (I-IV); botany (II-V); physics, astronomy (IV); chemistry, geology (V).

^e Swedish composition in the class.

In Classes I-III all the students have the same courses. With Class IV the school branches into two lines: The classical line (Latinlinien) with Latin, and the modern line (Reallinien) without that language. In Classes IV and V, however, the difference in the curriculum of the two lines only touches a few subjects, inasmuch as the seven hours Latin and the one hour drawing on the classical line correspond to six hours English and two hours drawing on the other; the courses in history are, moreover, somewhat different, so that the two lines can not be taught together in that subject. In Class VI: 1 greater differences appear in the two curricula, and at the same time the classical line is subdivided into two sections—Section A, with Greek, and Section B, without Greek.

The teaching extends over five to six hours daily. Instruction in singing, drilling and gymnastics, military drill (obligatory), and also instruction in English (voluntary) for students in the A section of the two highest classes, and in drawing and instrumental music for boys who desire to learn them, takes place at times outside the regular curriculum, often in the afternoons. Instruction in singing, obligatory to all students with ear and taste for music, in the lower five classes, but optional in the higher classes, must not occupy over two hours a week. Gymnastics is taught in all classes half an hour every day, or, if this is not feasible, at least in such a way that not less than three hours of instruction in the week is given to every division in gymnastics. Sometimes pedagogical gymnastics are replaced by running games conducted under the teacher's supervision and guidance, preferably in the open air. Military drill, replacing gymnastics, for the boys in Classes VI and VII, extends over five weeks at most at the beginning of the autumn term, for altogether sixty hours; during this period the principal may arrange with the teachers for a diminution in

the number of school hours for those classes to the extent of from seven to twelve hours a week.^a

In later years obligatory vacation tasks have been assigned to the students during summer vacations. The subject and extent of these tasks, which are the same for all pupils in the same class, are determined upon by the principal toward the close of the spring term.

New pupils are only entered at the beginning of a term. All who apply for entrance must be at least 9 years of age, and they must all pass a special examination, unless they only change schools, and present satisfactory certificates. The requirements for entrance into the first (i. e., lowest) class have been established by

^a Under date of December 22, 1904, Mr. Lagerstedt has communicated to this Office the following particulars relating to the proposed reform of secondary education in Sweden:

The secondary schools of Sweden are the direct continuation of the monastery, cathedral, and town schools, which were already in existence in the earlier part of the middle ages. The development of these schools since then naturally includes a long series of reforms and changes, each one more or less reflecting the time in which it occurred. In the month of May in this year (1904) the Swedish Riksdag made a decision to carry through a reform, which probably is one of the most important ever effected with regard to the secondary schools of Sweden. The chief features of this reform are as follows:

At present the complete secondary schools have a continuous course of nine years, following upon a course of three years in the common schools. Hereafter the complete secondary schools will consist of a lower modern school of six years, and of a higher "gymnasium" of four years. The "gymnasium," however, is not a direct continuation of the modern school, but continues from its fifth class, which makes the complete course of the individual pupils extend also hereafter over a period of nine years. Outside of the complete schools, consisting of both modern school and "gymnasium," in the larger cities, it is the intention to establish in a number of smaller cities only modern schools of six years.

The modern school course, as well as that of the present secondary schools, is a continuation of a previous common school course of three years. Pupils who have gone through the modern school undergo a final examination, which, if duly passed, is to entitle them to certain privileges, for instance (as it will in all probability be ordered), that they be received as apprentices in the telegraph or postal service department, etc.

At some places the modern schools may be arranged on the plan of coeducation of boys and girls. This is a very important innovation, being the first instance of the Government in Sweden establishing coeducational schools for the secondary education. The common schools have always been coeducational. This decision was preceded by a very careful investigation and gathering of information regarding coeducational schools, the experiment that had been made in that direction, their effect on the pupils, etc. Such information was gathered from the United States, as well as other countries.

The four year "gymnasiums," as proposed, are of two different kinds, namely, "Latin gymnasiums" and "modern gymnasiums," and are concluded by an entrance examination to the university. This examination is, in the main, the same as at present, and gives the same privileges, including entrance to the university, etc. In the Latin gymnasium opportunity is presented for those who so desire to study Greek. A very important change for the gymnasiums is that the students during their last two years are allowed a certain liberty in choosing their subjects of instruction. They may be entirely relieved from pursuing one or two subjects in order to enable them to study other subjects more thoroughly.

One of the most important features of the new reform, perhaps the most important of them all, is the curtailing of the study of the classical languages in the secondary schools. Hereafter Latin will be studied only during the last four years previous to the entrance examination to the university, and the Greek language only during the last two years. At present the Latin language is studied during six years and the Greek during four years. The commencement of Latin is consequently postponed for two years. It is now about thirty years since the study of Latin, on the initiative of Gunnar Wennerberg, the poet and composer, at that time cabinet minister and chief of the ecclesiastic department (education department), was reduced from 8 years to 6. The classical languages in our country, as well as in other countries, are consequently being ever more and more forced backward from their dominating position. Their retrogression is also manifested by the smaller number of pupils that apply themselves to the study of them. In the Swedish school exhibit in St. Louis there were some graphic charts exhibited, showing this very clearly. It might be seen from these, for instance, that while during the year 1875, 85 per cent of all pupils in the sixth and seventh classes (the last four years) studied Latin, and only 15 per cent belonged to the modern line, this condition gradually changed, so that in 1901-1903 only 47 per cent studied Latin, while 53 per cent belonged to the modern line. In 1871, 50 per cent of all the pupils in the above-mentioned classes studied both Latin and Greek, while in 1901-1903 only 15 per cent of all the pupils studied the two languages.

An important measure decided upon in connection with the new reform is the institution of a superior board for the secondary schools of the country, consisting of five members, to which board affairs hitherto managed immediately by the ministry of education or by the chapters of the dioceses are going to be handed over.

In conclusion may be mentioned the names of two men who were most instrumental in establishing the reform, the main features of which have just been given. They are Mr. Carl von Friesen, at present cabinet minister and chief of the ecclesiastic department (the education department), and Prof. Ernst Carlsen. The former was, before becoming minister, principal of a higher public secondary school in Stockholm and vice-chairman of the committee appointed by the Government, whose suggestions are the foundation of the reform now adopted. The latter was professor of a higher secondary school in Gothenburg. It was on his motion that the Riksdag of 1899 made the decision which is the foundation of the present reform. He also was a member of the above-mentioned committee. A short time ago he was appointed by the Government chairman of the first superior board for the secondary schools of Sweden.

law, and were modified to some extent (1894) in order to make it easier to pass from the common schools to the public secondary schools.

At the close of every spring term a general promotion to higher classes takes place throughout the school. All students considered worthy of it are moved up without special examination to the next class. The others may, if they wish, present themselves for examination at the beginning of the autumn term, being then moved up if that examination results satisfactorily; this category usually embraces some 20 per cent of those who are promoted. A boy who has spent two years in a class without promotion is, as a rule, excluded from the school.

TABLE 5.—*Number of students in the public secondary schools for boys.*

Average for autumn terms.	Whole number.		Classes I-III.	Classes IV and V.		Classes VI: 1-VII: 2.			Classes IV-VII: 2.	
	Total.	Per 10,000 inhabitants.		Classical line.	Modern line.	Classical line A.	Classical line B.	Modern line.	Classical line.	Modern line.
In 1875	12,717	29.1	6,844	1,928	1,356	1,303	893	393	4,124	1,749
1876-1880	14,376	31.9	7,393	2,159	1,593	1,307	1,183	741	4,649	2,334
1881-1885	14,986	32.5	7,094	2,364	1,626	1,263	1,848	791	5,475	2,417
1886-1890	14,507	30.6	7,116	1,897	1,874	910	1,843	867	4,650	2,741
1891-1895	14,914	30.9	7,340	1,700	2,467	701	1,523	1,183	3,924	3,650
1896-1900	16,578	32.9	7,818	1,619	2,921	825	1,561	1,834	4,005	4,755
In 1900	17,479	34.2	8,141	1,514	3,242	784	1,668	2,130	3,966	5,372

Every year, some time between April 15 and June 21, an examination of students reporting themselves for it is held at the various public secondary schools. This is the final or university entrance examination. The examination is conducted under the control and supervision of "censors" temporarily appointed by the Government, as a rule from among the university professors.

The examination is partly written, partly oral. The written examination takes place several weeks before the oral, and lasts from four to six days, the same at all schools. The papers are determined by the chief of the ecclesiastical department on the basis of suggestions made by the censors. The candidates who pass the written examination are entitled to enter also for the oral. As a rule, to gain the university entrance certificate, a student must pass satisfactorily in all subjects.

This final examination is required for entering not only the universities, but also various higher special schools, such as the military school, the veterinary institute, the pharmaceutical institute, and others. To enter the technical high school this examination is not necessary, though it entitles to such entrance, provided it has been passed on the modern line. So likewise the final secondary school examination, without being required, yet entitles the student to enter the State railroad, postal, or telegraph service, and it is required for entering the customs service.

The annual examination of the various classes at the close of the spring term, to which the principal issues a public invitation, together with his annual report, is only to be considered as an exhibition before the public, a solemn completion of the work of the year, before summer vacation, and has no connection with the promotion of the students to higher classes on the ground of meritorious work, which has already been made previously.

Students.—As seen in Table 5, it is only in recent years that a marked increase in the number of public school students is noticeable. A significant discrepancy between the various lines is clearly seen, the modern line having gained in attendance, while the classical (especially the A line, with Greek) has lost.

TABLE 6.—*Number of graduates from the secondary schools (i. e., number who passed the university entrance examination).*

Average for the years—	Total number.			Per 100,000 inhabitants.	From—		Students in State schools belonging to—			Matriculated at universities. ^b	
	Men.	Women	Total.		State schools.	Private schools. ^a	Classical line A.	Classical line B.	Modern line.	Total.	In per cent. ^c
1871-1875.....	612	2	614	14.36	557	57	.....	.....	65	430	70.0
1876-1880.....	570	4	574	12.75	470	104	266	137	67	376	65.5
1881-1885.....	773	11	784	17.02	665	119	268	263	134	509	64.9
1886-1890.....	760	27	787	16.60	658	129	269	327	122	462	58.7
1891-1895.....	665	27	692	14.33	575	117	145	285	145	350	50.6
1896-1900.....	801	49	850	16.89	701	149	169	273	259	369	43.4

^a Students from accredited private institutions, 1896-1900, average 87, and private students average 62; of these 149 students, 21 belonged to the A line, 72 to the B line, and 56 to the modern line.

^b The Caroline Institute and the private universities of Stockholm and Gottenborg, inclusive.

^c Percentage of the total number of graduates.

Of the total number of students entered at the public secondary schools, ordinarily only about one-fourth reach the final examination. During the quinquennial period 1893-1897 the average yearly number of students leaving these schools without taking the university entrance examinations was 1,833. Of these, 531 entered commercial life or commercial schools; 225 engaged in industrial pursuits of various kinds; 214 entered private schools or engaged in private study; 137 entered technical schools; 109, agricultural schools; 85, schools of navigation, etc. Above 20 per cent gave no information regarding their future career, while of those that gave such information 83 per cent engaged in practical pursuits or entered practical schools.

The number of students having passed the university entrance examination is seen in Table 6. Also here no very marked increase is shown in later times, and the period 1881-1885 presents the maximum. The number of students entering the universities has decreased both relatively and absolutely, as is also shown by Table 6. Thus were matriculated at the universities during 1871-1875 as many as 70 per cent of all that graduated, but during 1896-1900 only 43 per cent. This is owing to the ever-growing demands of practical life.

The mean age of students passing the university entrance examination from the public secondary schools between 1876-1880 was 19.96 years. Gradually this age has decreased, so that during 1891-1895 the average was only 19.26 years.

Teachers.—At the public schools there are, apart from the principals, three categories of teachers with fixed appointments, viz.: (a) lectors (in the higher schools only), who possess higher attainments, draw a higher salary than the others, and are required to teach chiefly in the upper classes; (b) adjuncts (or "colleagues" in lower schools), who possess lower attainments, draw a lower salary than the lectors, and are required to teach chiefly in the lower classes; exercise masters, who give instruction in drawing, music, gymnastics, and military drill. The total number of teachers during the school year 1899-1900 amounted to 1,022, viz.: 79 principals, 207 lectors, 529 adjuncts and colleagues, and 207 assistant masters. Thus there was one teacher for every seventeen pupils. Besides these teachers, there were 252 exercise masters.

The number of teaching hours a week required of a principal at a higher public school is 12-16, of a principal at a lower school 20-24, of a lector 18-22, and of an adjunct or "colleague" 24-30. In the lowest class instruction is given, as far as feasible, by a single teacher; in the next three higher classes likewise by one or two, or at most four. From the fifth class upward, the system of one teacher for each subject or group of subjects prevails.

The qualifications for becoming teachers in the public school are as follows: As regards theoretical knowledge, lecturers are required to have gained the doctor's degree in the philosophical faculty at a university. Adjuncts, etc., only the "candidate's" (master's) degree in the same faculty. As regards practical experience, both lecturers and adjuncts must have passed a probationary year (*Profår*).

The appointment of teachers is in the hands of the chapters (in Stockholm in those of the two boards of directors); against their decision complaint may be lodged with the Government. As is the case with the majority of Swedish officials, public school teachers with fixed appointments can not be removed unless upon judicial trial and sentence.

The salaries of the regular teachers are apportioned in five gradations. Five years of service entitles to promotion to a higher gradation from the next lower. A lecturer's salary thus rises from \$670 to \$1,206 and an adjunct's from \$402 to \$938. Ever since the year 1883 the Riksdag has annually granted an increase of salary to the extent of \$134, which must be added to the above figures. The Riksdag has, moreover, since the year 1901 granted the teachers, as well as most other State officials, an extra increase of 10 per cent of their salaries. The principals receive at the higher schools at first \$1,206, and after ten years of service \$1,340; in addition they are provided with a house, or with the rent for a house, and enjoy the above-mentioned increase of \$134. When a teacher has attained an age which, added to his years of service, makes up the number 100, he obtains a pension—80 per cent of his salary. Widows and children receive considerable sums in pensions out of a fund to which fixed contributions are annually made by the teachers.

During the school year 1899-1900, 27 positions (in drawing and music) in the public secondary schools were occupied by women.

Finances.—Every town where a public school is situated is bound to provide, free of cost, a site for the schoolhouse extensive enough to provide space for the games and open-air exercises of the boys. In certain cases the towns are also under obligation to build and keep the schoolhouse in repair; in other cases, again this duty falls upon the building funds of the schools and of the diocese. Where these have not proved sufficient the Riksdag has occasionally made a special grant to meet the wants. The Swedish school buildings may in general be said to fulfill, in a high measure, the requirements of practical utility and elegant appearance.

The cost of some recent school buildings (including their fitting-up, but not their site) has amounted to the following figures: The Normalm Classical School at Stockholm, \$226,000; the Modern School in Gottenborg, \$145,000; the school at Vexjö, \$85,000; the Modern School in Stockholm, \$210,000, and so on.

All students, except such as are unable to do so, or those transferred from other secondary schools, pay a matriculation fee of about \$2.50. They also pay a small term fee, from which, however, poor and at the same time promising boys may be partly exempted. The entire yearly amount paid to the school by each student not exempted from any part of the fee is \$8. This income is used for the purchase of light, fuel, and school material, for prizes, and for the building reserve fund.

The State expenditure for the public secondary schools for boys of Sweden amounted in 1900 to \$1,025,000, or 20 cents per inhabitant and \$59.50 per student. With the contributions of the communities (for schoolhouses, aid to the teachers for their rent, etc.), and of the special school funds, the total expenditure for public schools probably amounts to about \$1,250,000.

PRIVATE SECONDARY SCHOOLS FOR BOYS—COEDUCATIONAL SCHOOLS.

In consequence of the small fees demanded in the public schools, private enterprise in higher education has met with considerable difficulties, and the number of

private schools is still small. At present there are only five private schools for boys entitled to furnish university entrance certificates, viz, two in Stockholm, two in Upsala, and one in Lund. Of these, two are coeducational. The main income of these schools, as well as of various smaller institutions with fewer classes, consists of the students' fees; yet some of them also receive State grants. Such grants amounted for 1900 to \$9,380.

Aside from the two coeducational institutions referred to, which are complete secondary schools, there are some twenty other coeducational schools where the instruction is about the same as in the public five-class schools. Of these there are three in Stockholm. The others are found, for the most part, in smaller towns or places of greater industrial activity, more important railroad centers, etc. The coeducational schools of Motala and Hedemora may hold final examinations entitling the boys to enter Class VI: 1 of the public schools; the coeducational school of Falkenburg may likewise examine for Class IV.

SECONDARY SCHOOLS FOR GIRLS.

Secondary schools for girls are of recent date in Sweden. With the exception of the Wallin school (Wallinska skolan) in Stockholm and the Kjellberg school (Kjellbergska skolan) in Gottenborg, which were founded during the thirties, they all came into existence during the latter half of the nineteenth century. Before that time girls were taught at home by governesses or sent to boarding schools. The Higher Training College for Lady Teachers was established at Stockholm in 1861 for the purpose of training teachers both for the school and the family, and in 1864 was opened the State Secondary Normal School for Girls, which is connected with the training college and forms a practice school for its students. With the exception of these two establishments, all the higher schools for girls in Sweden are private institutions.

The Higher Training College for Lady Teachers comprises three one-year classes, in addition to which there is an optional fourth year course. The number of students in each of the obligatory classes is generally 25. In order to obtain admission to the college the applicant must have completed the age of 18 and have passed an examination testifying that she has attained the standard of knowledge which corresponds to a complete course at an eight years' secondary school for girls (vide below). Of the entire number of hours given in the obligatory classes, about 32 per cent are devoted to the French, German, and English languages; 24 per cent to religious instruction, the Swedish language, history, and geography; 23 per cent to mathematics, natural science, and hygiene; 8 per cent to pedagogics and the methods of teaching, and 13 per cent to singing, drawing, and gymnastics. Some of the subjects are, however, optional. The fourth course of the college is intended particularly for the training of specialist teachers. Each student, therefore, receives instruction only in those subjects which she herself chooses. All instruction at the college is free of charge, and poor and deserving pupils receive small scholarships from the State.

The normal school comprises three preparatory classes for children of 6 to 8 years of age, eight regular classes, and a continuation class, the last chiefly intended for instruction in domestic economy. The pupils of the school pay annual fees, ranging from \$20 in the lowest class to \$49.50 in the highest. In the continuation class the fee is \$27. Of the entire number of lesson hours in the eight regular school classes, 24 per cent are devoted to the French, German, and English languages; 33 per cent to religious instruction, the Swedish language, history, and geography; 15 per cent to mathematics, natural science, and hygiene, while no less than 28 per cent are allotted to writing, drawing, singing, needlework, and gymnastics. Some of the subjects are, however, optional.

In connection with these institutions a school of domestic science was opened in 1893, the pupils being not only those of the continuation class of the normal school,

but also others who wish to qualify for becoming teachers of domestic economy in secondary schools for girls.

Private schools.—The entire number of these schools is about 120, having altogether about 13,000 pupils. Started by private persons or associations, or by communities, they have had perfect freedom to develop in various directions, but have, at the same time, suffered from a lack of guidance and control, and, moreover, often felt the stress of money difficulties. These disadvantages have not remained unnoticed. In 1875 the State made them a grant of \$8,000, which grant afterwards became annual and at various times raised, until now it amounts to \$93,000. The conditions for enjoying the advantages of this grant are mainly that a certain number of pupils be instructed free of cost or at reduced terms, that the school in question submit to the control of the ecclesiastical department, and that the community or private persons contribute a sum at least equal to the grant made by the State. This annual grant is not to exceed \$800 for each school, or for schools instructing in domestic economy at most \$938. At present 103 schools enjoy such grants from the State, their combined number of pupils attending the regular classes being 10,694 (besides perhaps 3,000 in the preparatory classes). The fees paid are very different, varying from \$11 to \$40 in the lowest classes and from \$29 to \$67 in the highest, all per annum, the classes preparing for university entrance charging even more. In view of the virtually free instruction given to boys in the State secondary schools, these fees must be considered very high.

Several of the private schools for girls have their own school buildings, others are compelled to employ ordinary dwelling houses, which, especially from a sanitary point of view, often leave much to be desired. The length of the ordinary school course varies, but is generally seven to eight years. The number of schools with seven or with eight classes is about the same. Some few schools have only five or six classes. Almost all schools have two or three preparatory classes, in which, with but few exceptions, boys also are taught. About twenty schools have one or more continuation classes.

The subjects of instruction are chiefly the same as in the State Normal School for Girls, one or more additional subjects being, however, introduced into some schools. Very varying is the position given to the different subjects, especially as regards foreign languages. In most schools French is the fundamental language, in others German. During the last few years though there seems to be a tendency to make the French and German languages change places, several schools having of late made German the fundamental language. English is usually the third language taught, though in some schools it ranks second.

The continuation classes are formed for various purposes and therefore very differently arranged, some being intended to prepare for university entrance or for admission to the Higher Training College for Lady Teachers, others to train teachers, or to give the pupils greater insight into various subjects. The university entrance examination can be passed at five of the schools for girls (four in Stockholm and one at Malmö). The right of passing this examination was given to women in 1870. At first very few availed themselves of this right, but during each of the last three years the number has been 50 or more.

In most of the schools there are both men and lady teachers. The men, who, with few exceptions, are teachers also in the State secondary schools for boys, give comparatively few lessons, and are paid per hour. The salaries paid to lady teachers are, as a rule, very low, especially considering the demands made on them. On an average they do not exceed \$270 per annum. Most head mistresses get but \$320 to \$400, besides residence and fuel. A raising of the salaries has, however, in 1902 been decreed by the State as a condition for the receiving of State grants. There are two institutions for pensioning lady teachers.

3. HIGHER EDUCATION.

Sweden has two State universities, viz, in Upsala, founded 1477 (the oldest in Scandinavia), and in Lund, founded 1668, chiefly with a view to promote a closer union of the provinces then newly acquired from Denmark with the rest of Sweden. Both universities are thus, as in England, located in country towns. To make up for the lack of a State university in Stockholm, the capital, private munificence has there established a private university; the same thing has been done also in Gottenborg, the second city of Sweden. Besides this, there has existed in Stockholm since 1815 a medical faculty, the Caroline Institute, founded and supported by the State.

THE STATE UNIVERSITIES.

The universities established by the State are, as already mentioned, the two complete universities of Upsala and Lund and the Caroline Institute in Stockholm, the last named forming only a medical faculty, the greatest of its kind in the country. Like the other State schools, these institutions also range under the ecclesiastical department.

According to statutes of January 10, 1877 (with some amendments, 1891), the highest superintendence of the universities and the Caroline Institute is exercised by a chancellor appointed by the King on the nomination by electors from the three institutions. The chancellor watches over the observance of the statutes, issues instructions respecting the administration of the finances and estates of the universities, and recommends finally and officially in questions of appointments, and, on the whole, in all such measures concerning the universities as are submitted to the decision of the Government. He does not receive any salary, but is entitled to appoint a salaried chancellor's secretary for his office. The representative of the chancellor, and in certain cases an intermediate authority between him and the local academical authorities, is the vice-chancellor, whose office is filled at the University of Upsala by the archbishop and at the University of Lund by the bishop of the diocese of Lund.

The immediate care and supervision of all that concerns the university is exercised by its rector, who is elected for two years at a time by the greater consistory (cf. below) from among the professors in ordinary, and may be reelected. In the absence of a rector, the office is exercised by a vice-rector who is elected in the same way and for the same length of time.

The rector is assisted in the government of the university by the two academical consistories, in which he is the chairman. The greater consistory consists of all the professors in ordinary, and has the care of all the more important affairs of the university, proposes candidates for the filling of vacant professional chairs, grants stipends, etc. The lesser consistory consists, besides the rector and vice-rector, of five other members who are elected for three years. It has to enforce the observance of the prescribed regulations respecting the lectures and examinations, execute the disciplinary authority of the university, etc. There is also a finance committee for the administration of the purely economical affairs of the university.

According to the statutes at present in force (confirmed 1876, altered 1891) the teachers of each of the two State universities are distributed with respect to the different sciences they represent upon four faculties, viz, the faculties of theology, law, medicine, and philosophy. The last named is further divided into two sections, viz, the section of humanistics and that of mathematics and natural sciences. Each faculty or section consists of its ordinary and associate professors, who every academical year, from among its members, appoint a chairman, called "dean." The degrees conferred by every faculty are those of candidate, licentiate, and doctor. Doctors of divinity, however, are named by the Government, without examination. Besides, certain civil-service examinations are passed in the faculties of theology and law.

Professors at the universities are either ordinary or associate, of which the latter have smaller salaries and are not entitled to a pension. There are also permanently appointed laboratory assistants in the various medical and scientific laboratories, an astronomical assistant for each of the observatories, and an assistant in the theological faculty. Besides these, an indefinite number of docents can be appointed for each professorship. The practical instruction in modern languages is given by lecturers. Special teachers, called "instructors," are appointed for the teaching of gymnastics, music, and drawing.

Appointments.—Vacant professorships are filled either on application or by direct appointment. In the former case the position must be publicly announced vacant. When candidates, within a prescribed limit of time, have applied and presented their testimonials of competency, the respective faculty or section, upon the written argumentation of at least three specialists in the subjects concerned, express themselves regarding the fitness and relative competency of the applicants. Then the greater consistory proposes three of these applicants for appointment in the order of their relative merits. Against this recommendation an appeal may be made to the King. After the vice-chancellor and the chancellor have expressed themselves, the appointment is made by the Government. But if there is a prospect of acquiring for the vacant professorship a scientific man known for extraordinary skill, the respective faculty or section may, before the place is publicly declared vacant, by a majority of two-thirds of its members, determine to offer him the position. In such a case the method of procedure is simplified by sending the recommendation of the faculty, together with the opinion of the greater consistory and of the vice-chancellor, to the chancellor, who presents it, together with his own opinion, to the Government for decision. Laboratory and observatory assistants are appointed in a similar way, only that the chancellor makes the final appointment. Docents are appointed by the chancellor on application, or on recommendation by the professor concerned, after the faculty or section in question has given its opinion. The above system of promotion being, in many cases, considered antiquated, the Government has appointed a committee to propose reforms, and this committee has recently (1901) submitted its report, recommending various changes in existing conditions.

The total number of teachers at the universities and the Caroline Institute amounted in 1900 to 289, of whom 76 were professors in ordinary, 56 associates, 20 laboratory and astronomy assistants, lecturers, etc., and 137 docents. Of the 132 ordinary and associate professors, 14 belonged to the faculty of theology, 15 to the faculty of law, 48 to the faculty of medicine, 31 to the humanistic section of the faculty of philosophy, and 24 to the section of mathematics and natural sciences of the same faculty. Of the whole number, 61 belonged to the University of Upsala, 49 to the University of Lund, and 22 to the Caroline Institute.

The salary of the professors in ordinary is \$1,608 (with an advance of \$134 after five years of service, and another after ten); of the associates, \$1,206, likewise with the two said advances. Assistants in the medical faculties receive \$1,206, those in the philosophical faculties and observatories \$804. The docents have no fixed salaries, but the State has established for their benefit a number of docent stipends of \$402 and \$322, which, on the recommendation by the respective faculty, are given by the chancellor to deserving docents for a period of three years, subject to extension. The university lecturers in modern languages each receive a yearly fee of \$536.

Ordinary professors (but not associates) are entitled to a pension of \$1,206 to \$1,474 on attaining 65 years of age. This latter amount is given to those who have held their professorship ten years at least. In some cases the Riksdag has granted a pension of \$804 to associate professors. Widows and children of deceased professors (ordinary or associate), as well as those of any deceased official of the universities, receive pensions from special pension funds, to which every official must contribute.

The *academical year* begins September 1, and is divided into the autumn term (September 1-December 15) and the spring term (January 15-June 1). Both the ordinary and the associate professors are, as a rule, bound to lecture publicly on their science one hour four days a week. All public instruction, whether by lectures or seminary exercises, is free of charge, but the private instruction given for the most part by the docents is paid for.

The *courses of study* are at Swedish universities unusually long. On an average six to eight years are required for the degree of licentiate of philosophy, seven years for the candidate's degree in law, nine years for the candidate's degree in theology (for the ordinary examination for holy orders five years), and for licentiate's degree in medicine as much as eleven years. In part, this condition of things depends upon the comprehensive studies which are required, but in part also upon the somewhat unpractical arrangements in regard to teaching. Attempts have been made during the last few years to find a remedy for the latter defect by the establishment of the so-called propædæutical courses for the preparatory examinations, and at present a royal committee is busy with working out a plan for the reorganization of the academical examinations.

Students.—To matriculate at the university a student must have passed the university entrance examination (the final examination at a higher state secondary school).

Every student must belong to one of the nation societies, or "landskap," into which the body of students has been divided from olden times for the promotion of industry and morality and for mutual aid. At Upsala there are 13, and at Lund 12 "nations," each comprising in the main students from special parts of the country, and each under the control of an inspector chosen by the society itself from among the ordinary professors of the university. At Upsala these societies usually have their own houses (clubs), and the disposal of pretty large funds; at Lund the students possess in common a large building called the academical society's building. The part played by the nation societies in Swedish student life has been notably great and important.

TABLE 7.—*Number of university students in Sweden.*^a

Period.	Mean population.	Average number of students, autumn and spring terms.						
		Upsala.	Lund.	Caroline Institute. ^b	Stockholm. ^c	Göteborg.	Total.	Per 10,000 inhabitants.
1870	4,164,000	1,403	454	54	.....	.....	1,911	4.59
1871-1875	4,274,000	1,554	542	82	.....	.....	2,178	5.10
1876-1880	4,500,000	1,448	612	153	.....	.....	2,213	4.92
1881-1885	4,605,000	1,660	807	253	40	.....	2,760	5.99
1886-1890	4,742,000	1,825	889	375	46	.....	3,135	6.61
1891-1895	4,832,000	1,564	728	380	50	32	2,754	5.70
1896-1900	5,032,000	1,495	637	326	47	59	2,564	5.10
1900	5,117,000	1,449	642	294	40	67	2,492	4.87
1902	5,187,000	1,497	688	298	55	81	2,619	5.05

^aAccording to G. Eneström, and to "Report on the School Question," by N. Höjer, A. Lindhagen, and S. Boije.

^bIn Stockholm.

^cThe private University of Stockholm.

The number of university students in Sweden during the years 1870-1902 is found in Table 7. As may be seen, the total number has varied very much. The decline of late years must be partly ascribed to a decrease in the number of matriculated students, but partly also to a more rapid completion of required courses. Among the total of 2,529 students in the autumn of 1900, 276 belonged to the theological

faculty, 443 to the law faculty, 514 to the medical, and 1,296 to the philosophical, in which last number are included students preparing for the preliminary examinations hitherto required for entrance into the three other faculties. Among the students of 1903 (spring) there were 89 women.

The total expenses amounted, in 1902, at the University of Upsala to \$272,000; at the University of Lund to \$152,000, and at the Caroline Institute to \$66,000, or, altogether, to \$490,000. Of this amount, the universities supplied part from their own funds, viz, the University of Upsala, about \$121,000; the University of Lund, about \$40,000, and the Caroline Institute, \$6,000. As may thus be seen, these establishments possess considerable private means.

PRIVATE UNIVERSITIES.

As already mentioned, two such establishments, called *Högskolor*, have been founded of late years, viz, in Stockholm and in Gottenborg, of which the former commenced its work in 1878 and the latter in 1891. The higher direction of the affairs of these institutions is confided to special boards of directors under the superintendence of the chancellor of the State universities. The institutions are placed under a Government control, the University of Gottenborg from its beginning, that of Stockholm only since 1904; the statutes are confirmed by the Government and the presidents of the boards are appointed by the same authority for such a time as in each case may be decided. The directors determine, within the amount of money available, what offices shall exist at the university, and the salaries attached to them. The directors have also the power, after hearing the reports of the council of teachers and selected specialists, to appoint professors, either after application or directly; but the appointment must be submitted to the approval of the Government. Docents are appointed by the board upon the recommendation of the council of teachers and after chancellor's hearing.

(A) *The University of Stockholm* (Stockholms Högskola). The board of directors is constituted in the following way: As aforesaid, the Government appoints 1 member, viz, the president, the Swedish Academy also chooses 1, the Academy of Sciences 2, and the town council of Stockholm 2; the rector of the university is a member *ex officio*, and the eighth member is chosen by the 7 before mentioned.

The immediate direction of the institution is exercised by the rector (chosen by the council of teachers for two years at a time), and by the council of teachers, consisting of the ordinary teachers or their temporary substitutes. At present only the faculty of mathematics and natural sciences has been established. Besides, there are professorships in the history of art and history of literature, and lectures have been given in history, political economy, and other subjects.

No examinations have been hitherto passed at the university. Its work has been exclusively in the interest of scientific investigation and education. Yet recently a proposition has been made to secure the privilege of examining for university degrees, which may be decided upon by the Government early in 1904.

In the autumn term (1903) there were at the university 9 ordinary professors, 3 temporary teachers, 15 docents, and 7 amanuenses. Of the professors 3 received \$1,876, the others from \$1,608 to \$1,206.

Teachers who have reached 65 years of age and been in the service of the university for at least thirty years have a right to a pension amounting to 70 or 80 per cent of the salary at the time of resignation.

The academical year of the university begins September 1 and is divided into two terms (September 1–December 15 and January 15–June 15). The professors must give two public lectures every week, and impart the instruction and directions necessary for the pupils' studies. Most of them are also directors of some scientific institution. During the years 1901–1903 the average number of students amounted to,

respectively, 47, 55, and 58, and the corresponding number of attendants to 82, 64, and 102.

(B) *The University of Gottenborg* (Göteborgs Högskola), having from the beginning placed itself under Government control (statutes of 1839 confirmed by the Government), has, in consequence of this, received (in 1893), within certain limits, the right of holding examinations for university degrees.

The board, consisting of nine directors, is appointed in the following manner: The president, as mentioned above, is nominated by the Government for such a time as in each case may be decided, 4 members are chosen by the town council of Gottenborg, 1 by the Royal Society of Science and Literature in Gottenborg, 1 by the directors of the Gottenborg Museum, and 1 by the ordinary members of the united staffs of the higher classical and modern secondary schools of Gottenborg, all (excepting the president) for three years at a time; the rector of the university is a member *ex officio*. At present only such teaching is carried on as can be considered as belonging to the faculty of humanistics. Those partaking of the instruction are partly regular students, who have been matriculated after passing the common university entrance examination, and partly specials students, who by permission of the different teachers, and on payment of special fees, attend certain lectures or exercises, and partly auditors, who attend the public lectures free of charge. The number of regular students at the university, during the spring term of 1903, amounted to 85, of special students to 117, and of auditors at the public lectures to 1,576.

4. TECHNICAL EDUCATION.

Technical education at the present moment holds a very high position in Sweden. With regard to the considerable distances, it were, however, to be desired that schools for elementary instruction within this department became more numerous than now is the case, and also the higher institutions stand in need of being enlarged.

Higher scientific instruction in technical subjects is imparted at the Technical High School in Stockholm and at the higher division of Chalmers' Polytechnical College in Gottenborg. In the second rank follow the lower division of the above-mentioned Chalmers' College, the five technical colleges mentioned further on, and a special technical school at Eskilstuna. A multifarious instruction and education are offered at the Technical School in Stockholm; finally, there are about forty lower technical schools in smaller towns.

The Technical High School includes special divisions for: (A) machine design and mechanical technology, with a triennial or quadrennial course, or else naval engineering; (B) electrotechnics; (C) chemical technology, with a triennial course; (D) mining, divided into classes for mining mechanics, with a quadrennial course; metallurgy and smelting, with a triennial or quadrennial course, and mining proper, with a triennial or quadrennial course; (E) architecture, with a quadrennial course and the instruction so arranged that the pupils after three years' study have the right to proceed with their studies at the Academy of Arts, and (F) civil engineering, with a quadrennial course.

The total number of regular and special pupils was, during the years 1896-1902 (spring terms), respectively 305, 277, 283, 309, 360, 373, and 393. The number of graduates, during the years 1896-1902, was, respectively, 107, 67, 79, 88, 87, 89, and 96.

An institution for the testing of materials, with a director of its own, was established in 1896 in connection with the mechanical laboratory. Its object is to test metals, building stone, cement, and above all the strength of various building materials; and such tests are made also for the public according to fees and regulations fixed by Government.

Chalmers' Polytechnical College in Gottenborg is divided into a lower division with a triennial course; and a higher division with a triennial course and subdivided into five sections or professional schools: One for mechanics, one for electrotechnics, one for technical chemistry, one for the art of building, and one forming a special school for shipbuilding. The number of students during the spring term of 1903 was 431.

The five technical colleges impart both theoretical and practical instruction in the elementary branches of technical knowledge to those who intend to devote themselves to industrial pursuits. The course of instruction covers three years; the school year consists of thirty-six weeks. The minimum age of entrance is fixed at 14. The admission examination embraces Swedish, mathematics, history, and geography. Youths who have passed the fifth class of a State secondary school with certificates of knowledge in these subjects, are exempt from the admission examination within a space of two years after leaving the college. The admission fee is \$2.50; the term fee, \$2.50 at most. The instruction is at each of these schools imparted by 4 lectors, a workshop foreman, and a certain number of associate teachers. The number of pupils amounted during the spring term of 1903 to 416 in all the five schools together.

According to the statutes in force, the instruction shall comprise: Mathematics, viz, (a) arithmetic, algebra, planimetry, stereometry, the theory of series and logarithms, plane trigonometry, and the first principles of analytical geometry; (b) descriptive geometry, together with geometrical drawing; (c) practical geometry, surveying, leveling, with drawing and field exercises. Mechanics: (a) The laws of the equilibrium and movement of bodies; (b) the theory of mechanics, machine drawing and design of simple machines and parts of machines; (c) mechanical technology. Natural philosophy: Experimental physics with reference to the most important applications of that science in industries. Chemistry, inorganic and organic, with laboratory work and chemical technology. Mineralogy and geognosy. Swedish and German, English or French, according to the final decision of the different boards of directors. Bookkeeping and the science of commerce. Building: freehand drawing and modeling; work in the workshops. Gymnastics and exercise of arms.

The *Technical School of Eskilstuna*, opened under another name in 1855, was enlarged in 1872, and when, in 1888, the town council had voted a grant to a professional school for finer cutlery and metal industries, these establishments were united in 1890 under the present designation.

In the older division, the Sunday and evening school, the instruction embraces: Mathematics as at the technical colleges, with the exception of the first principles of analytical geometry; mechanics, natural philosophy, and chemistry, as at the technical colleges, chemical technology excepted; Swedish, with composition; German or English; copy writing; freehand drawing and modeling; bookkeeping, to meet the requirements of industries; building. In the professional school for cutlery and metal industries: Freehand drawing, with the principles of style; modeling; wood carving; engraving; metal casting; enclashing; embossing; etching; galvanizing; forging; filing, and turning.

The *Technical School of Stockholm*, opened as a private school in 1844, has since been often enlarged and reorganized, and finally, in 1860, became a State school. It was thoroughly remodeled in 1878 and 1879, when its activity was restricted within the limits of purely technical instruction, and when a higher industrial art school and a professional building school were added. The instruction of the higher industrial art school has been grouped in two sections—one for industrial arts (with five professional divisions), the other a training school for teachers of drawing, writing, and modeling. In 1890 was added a professional school of mechanics with seven professional divisions.

The school work is carried on in five head departments: (I) The technical evening and Sunday school, (II) the technical school for females, (III) the higher industrial art school, (IV) the professional building school, and (V) the professional school of mechanics. Besides, instruction is imparted in the principles of style, art needlework, professional and decorative painting, photography, form anatomy with drawing, a course for electrical fitters, and gymnastics.

During the school year 1901-2 there were 2,171 students, a considerable number, testifying strongly to the importance of this school. The number of teachers was 92, of whom 32 in ordinary. At present a plan is being worked out with the purpose of a further extension and comprehensive changes in the organization of the school, chiefly by dividing it into several educational institutes in different parts of the city.

Finally there are the *lower technical schools*—at present 41 in number—whose activity varies according to the special branches of industry prevalent in the districts where they are located. They are supported mainly by the communities of these places, but stand under State inspection, and also receive State grants, in 1900 to a total amount of \$16,000. In 1900 the number of teachers at these schools was 293 and that of the pupils 6,817, of whom 1,275 were females.

5. SWEDISH GYMNASTICS.

The Swedish gymnastics derive their origin from Per Henrik Ling (1776-1839). Before his time, it is true, interest had been awakened in favor of a more thorough exercise of the body, but there existed nothing of gymnastics in the present sense of the term.

According to Ling's idea, the selection and kinds of exercises must be grounded on the requirements of the body itself. The body itself is consequently the object of, as well as the principal instrument or implement for, the performance of the work to be done. In many exercises, however, external implements are also needed, and these have been devised with exclusive regard to obtaining a good result from the necessary exercises. Through the correct use of the implements it becomes increasingly possible to limit more precisely the form and the scope of action of a movement. This limitation has been called localization, sometimes isolation, to distinguish it from a combination of forces which is also necessary to obtain the effect desired. Such combination has been called synergy or cooperation.

What has been done after Ling's death for the consummation of his work has been, for the most part, effected by his immediate successor, Gabriel Branting (1799-1881), and by his son, Hjalmar Ling (1820-1886). Hjalmar Ling represented by very striking drawings, made by himself, thousands of forms of movements, and he formed a collection of these and arranged them, in harmony with his father's plan and views, according to their effect on the organism, into different classes. Ten classes of gymnastic movements are thus shown to exist. Some of these may with advantage be further subdivided into two or more groups. He also drew up lists of movements suited to different ages, and rendered possible pedagogical gymnastics in common schools and in female education.

The movements in each of the above-mentioned classes have been arranged in progression according to the degree of effort they call forth. In practice, movements calling for about the same degree of effort should, out of all the classes, be arranged together for a programme of exercises—a so-called "day's exercise"—for daily use. A number of movements requiring less exertion should be inserted among the specific ones from each class so as to fill out the day's exercise into a complete set of gym-

nastic exercises. It is, namely, requisite that every part of the body and the organs in general should receive each its needed share of the day's exercise, which, as a whole and in detail, must be accommodated to the degree of development of the pupils. The number of pupils practicing at one time, which is sometimes rather large, must therefore be divided into several smaller sections, so that those who have attained the same degree of development may practice together.

That a sufficiently great effort may be called forth, and at the same time overstraining prevented, the arrangement of the movements in the day's exercise should, moreover, be such as constantly to promote an equilibrium between respiration, the action of the heart, and muscular work. This is obtained by making the movements act upon the provinces of the different vessels alternately, so as to increase or relax the circulation to and from various parts of the body. In connection with this the rate of breathing must by turns be increased and slackened, while the breathing itself is drawn deeper. Besides the various movements with their different effects a means to this end consists also in a gradually increasing exertion in the day's exercise up to rather beyond the middle, after that in decreasing the exertion more rapidly toward the end; and when the whole day's exercise has been gone through both the action of the heart and the breathing ought to be strong and deep but calm.

The great expectations which Ling entertained in regard to the Central Gymnastic Institute are being regularly and surely realized. The institute has, during its ninety years' existence, developed to a very considerable extent. All teachers of gymnastics, women as well as men, are trained there for all the educational establishments throughout the country, thus also for the military schools. For this purpose there are a one-year, a two-year, and a three-year course for men and a two-year course for women. The three first-mentioned courses follow one another immediately and are preparatory each for the next; the third year's course is devoted exclusively to instruction in subjects for training in medical gymnastics. The number of pupils at the institute has so increased that at present it amounts to about 115, of whom 55 are women.

In all the State secondary schools of at least five classes in the Kingdom there are well-lighted and airy gymnastic halls, in which the exercises are conducted by teachers trained at the Central Gymnastic Institute. According to the statutes in force, every pupil whom the physician has declared sufficiently strong must practice gymnastics at least half an hour daily, besides which the pupils in the sixth and lower seventh classes must have two hours' instruction per week in fencing.

In all the training colleges for common school teachers a staff of equally well-trained leaders is employed to conduct gymnastic exercises for the future teachers, who, during their four-year course, are also trained to teach gymnastics in the common schools, where gymnastic exercises are a compulsory subject. Also at the people's high schools the introduction of gymnastics has begun in earnest in spite of the entirely private character of those establishments. Ten of these have now their own gymnastic halls. Besides, there exist in the larger towns privately organized gymnastics at so-called gymnastic clubs, as well for women as for men; also for individuals who do not belong to any organized association, but practice gymnastics only for the benefit of their health.

In the army and navy the same system is applied in schools of all grades, for recruits, corporals, noncommissioned and commissioned officers. Lastly, it may be added that everywhere in Sweden the Ling system is followed.

CHAPTER XII.

EDUCATION IN GREAT BRITAIN AND IRELAND, 1903.

Great Britain and Ireland, constitutional monarchy; area, England and Wales, 58,180 square miles; population, 32,536,075 in 1901. Scotland, 29,820 square miles; population (estimated, 1899), 4,281,850. Ireland, 32,533 square miles; population (estimated, 1896), 4,535,516.

Information on education in Great Britain in previous Reports.

Title of article.	Report of—	Pages.
Detailed view of the educational system in England	1888-89	78-111
Religious and moral training in public elementary schools, England and Wales	1888-89	438-457
Brief view of the educational system, with current statistics	1889-90	237-248
Educational system of Scotland	1889-90	187-226
Elementary education in London and Paris	1889-90	263-280
Brief view of systems of England and Scotland, with current statistics and comparison with 1876 (England); 1880 (Scotland)	1890-91	125-134
Provisions for secondary and for technical instruction in Great Britain	1890-91	135-150
Educational system of Ireland	1890-91	151-164
Elementary education in Great Britain and Ireland, 1892	1891-92	97-104
Technical instruction in Great Britain	1891-92	105-137
Elementary education in Great Britain	1892-93	203-208
Religious instruction under the London school board	1892-93	208-218
Great Britain and Ireland, educational statistics and movements, 1893	1893-94	165-185
Educational systems of England and Scotland, with statistics and movements, 1893-94	1894-95	251-273
The English educational bill of 1896	1895-96	79-121
Education in Great Britain and Ireland, 1895-96, with detailed statements of the development of the English system	1895-96	123-125
Education in Great Britain and Ireland: Statistics, legislation, 1870-1897	1896-97	3-14
Elementary education in London	1896-97	15-27
Education in Great Britain and Ireland: Recent measures pertaining to the administration of the system; to the improvement of the teaching force; the extension of the curriculum—Proposals respecting secondary education—Universities and university colleges	1897-98	153-167
Brief conspectuses of the systems of elementary education in England, Wales, Scotland, and Ireland, with current and comparative statistics—Details of the current movements in England, with especial reference to recent legislation—Review of recent university movements	1898-99	3-65
Education in Great Britain and Ireland: Current statistics; statistical review, 1870-1899—Board of education; organization and scope—University movements	1899-1900	1167-1204
Education in Great Britain and Ireland: Statistics, current and retrospective; measures affecting higher grade and evening schools—Status of secondary education—Statistics of universities and university colleges—The Government Education Bill, by E. Lyulph Stanley—A National System of Education, by Cloudesley Brereton—The Royal Commission on the State of University Education in Ireland, paper by Judge O'Connor Morris	1900-1901	939-1008
Education in Great Britain and Ireland: Current statistics—Elementary education (England); retrospective statistics; the education law of 1902, reactionary and progressive tendencies; text of the law; opinions on, James Bryce, M. P., London Times; D. C. Lathbury, T. J. Macnamara—Historical survey of secondary education in England, with statistics and typical programmes—State of secondary education in Scotland and Ireland—Higher education in Great Britain and Ireland; statistics and current notes	1902	1001-1067
Education in Great Britain and Ireland: Current statistics—The English system as organized under the law of 1902; passive resistance to the law; the new law for London, text and criticism of—Secondary and technical education as affected by the law—Retrospective tables—Scotland: Statistics—Secondary and technical education—Universities and university colleges in Great Britain—Ireland: System of national education; secondary and technical education; the university problem	1903	227-271

TOPICAL OUTLINE.

Current educational statistics, Great Britain and Ireland.—Elementary education, England.—Brief conspectus of the system as organized under the law of 1902.—Progress in the application of the new law.—Detailed statistics of elementary schools.—Code or regulations for elementary schools authorized by the board of education and to go into effect in 1905.—Chronological epitome of the history of the elementary school system.

System of public education, Scotland.—Brief conspectus of the system.—Comparative statistics of elementary education.

Education in Ireland.—Brief conspectus of the system of national education, with statistics current and retrospective.—Proposed reform of the system.—Preliminary investigations (1) by special inspectors appointed to inquire into the status of schools aided by the intermediate education board; (2) by inspector appointed to inquire into the condition of elementary schools.—Report of the latter.—Status of higher education in Ireland.

Investigations relating to physical training and physical deterioration in Great Britain.

Summary of current educational statistics—Great Britain and Ireland.

Sources of information.	Institutions.	Date of report.	Registered students or pupils.	Professors or teachers.	Expenditure.
<i>England and Wales.</i>					
Statesman's Year-book, 1904.	Universities:				
	Oxford (22 colleges, 5 halls, and noncollegiate students).	1903	3,570	-----	-----
	Cambridge (17 colleges, 1 hostel, and noncollegiate students).	1903	2,900	-----	-----
	Durham (1 college of arts, 1 medical college, 1 college of science).	1903	1,831	98	-----
	London ^a	1903	^b 6,083	934	-----
	Victoria (2 colleges).....	1903	1,914	123	-----
	Birmingham.....	1903	814	94	-----
	Liverpool.....	1903	667	115	-----
	University of Wales (3 colleges).	1903	1,495	155	-----
	University colleges.....	1903	^c 6,871	259	-----
Official report, 1903-4.	University colleges for women.	1903	468	-----	-----
	Elementary day schools.....	1903	5,975,127	-----	\$63,897,365
	Night schools.....	1903	657,594	-----	-----
	Training colleges for elementary teachers.				
<i>Scotland.</i>					
Statesman's Year-book, 1903-4.	Universities:				
	Aberdeen.....	1903	814	64	-----
	Edinburgh.....	1903	2,990	114	-----
	Glasgow.....	1903	2,178	119	-----
	St. Andrew's (3 colleges).....	1903	546	91	-----
	Glasgow Technical College.....	1903	374	-----	-----
Official report, 1903-4.	Elementary day schools.....	1903	785,473	20,166	6,854,375
	Higher grade schools.....	1903	4,548	-----	-----
	Training colleges for elementary teachers.	1903	1,385	-----	-----
<i>Ireland.</i>					
Statesman's Year-book, 1904.	Universities:				
	Dublin.....	1903	936	80	-----
	Belfast, Queen's College.....	1903	342	41	-----
	Cork, Queen's College.....	1903	199	24	-----
	Galway, Queen's College.....	1903	97	22	-----
	University College, Dublin.....	1903	180	20	-----
Official report.....	Elementary day schools.....	1903	741,795	13,144	6,439,917
	Training schools for elementary teachers.	-----	1,080	-----	-----

^a London University includes 6 colleges of arts and science, 6 theological colleges, 1 college of agriculture, 1 technical college, 12 medical schools, and the London School of Economics.

^b Also 443 evening students; the statistics of the medical schools included are incomplete.

^c Day and evening.

ELEMENTARY EDUCATION IN ENGLAND—BRIEF CONSPECTUS OF THE SYSTEM AS ORGANIZED UNDER THE LAW OF 1902.

The system of public elementary education in England is in the process of transition from the basis established by the law of 1870 to that of 1902, which went into operation March 26, 1903.

The new conditions established by the law of 1902 relate almost exclusively to the local administration of schools. The provisions of the law of 1870 and subsequent amending laws are continued in force, excepting so far as they are explicitly annulled by the law.

Local authorities.—The local authorities in charge of elementary schools are county and county borough councils, replacing the former elected school boards, and having general charge of (1) board schools, henceforth to be known as council or provided schools, and (2) voluntary (i. e., chiefly church) schools, to be known as nonprovided. The county and municipal councils become the local agents for the disbursement of the Government grant for elementary education. The councils are further empowered to raise the additional moneys required for the maintenance of elementary schools by local taxes, which are henceforth to be applied to both the provided and the nonprovided schools.

The educational functions of the councils, excepting that of raising school money by taxation, may be delegated to education committees constituted under schemes formed by the respective councils and approved by the board of education.^a Every scheme for the formation of an education committee must provide for the appointment by the council of a majority of the members of the committee and for the inclusion of women in the committee.

Where the local education authority is a county council all public elementary schools must have a body of managers, to be constituted by the local authority. In the case of nonprovided (i. e., church) schools, these managers must include foundation managers, not exceeding four (excepting in special cases), and managers appointed by the local authority, in the proportion of two to every four foundation managers.

The managers of a nonprovided school must carry out any directions of the local education authority as to the secular instruction to be given in the school, including any directions with respect to the number and educational qualifications of the teachers to be employed for such instruction, and for the dismissal of any teacher on educational grounds; but if the managers fail in these respects, then the local education authority shall have the power themselves to carry out the direction in question as if they were the managers; but no direction given under this provision shall be such as to interfere with reasonable facilities for religious instruction during school hours.

The managers of the school must also provide the schoolhouse, free of any charge to the local authority, and keep the schoolhouse in good repair, and make such alterations and improvements in the buildings as may reasonably be required by the local education authority.

It is expressly provided that the local education authority shall have power to inspect nonprovided schools, and that its consent shall be required to the appointment and dismissal of teachers, head teachers excepted; but the councils may not withhold consent to the appointment nor interfere with the dismissal of

^a Central authority substituted by law of 1899 for the committee of council on education. In the reorganization of the department of education Mr. R. L. Morant becomes secretary to the board of education, replacing Sir G. W. Kekewich, who resigned the position November, 1902. On the 12th of May, 1903, Mr. Michael E. Sadler resigned the position of director of special inquiries and reports, which he had held from its establishment in 1895. In June following Dr. H. F. Heath, academic registrar of the University of London, was appointed to the vacant directorship.

teachers on religious grounds. Moreover, in nonprovided schools "assistant teachers and pupil teachers may be appointed, if it is thought fit, without reference to religious creed and denomination. [Head teachers appointed independently of the local authorities are naturally chosen on denominational grounds.] In any case in which there are more candidates for the post of pupil teacher than there are places to be filled, the appointment shall be made by the local education authority, and they shall determine the respective qualifications of the candidates by examination or otherwise."

Religious instruction.—In provided schools no sectarian instruction is allowed. Nonprovided or denominational schools are prohibited by a conscience clause from forcing religious instruction upon children whose parents object to the same.

Compulsory school attendance.—The provisions with respect to compulsory school attendance are unchanged. Every local authority is obliged to make by-laws under which the upper limit of age for compulsory attendance must not be less than 12 years, and at the discretion of the local authorities may be raised to 14 years.

Sources of support for elementary schools.—The Government grant, which furnishes at present very nearly half the support of elementary schools, is applied on the same conditions to provided and nonprovided schools. The balance of the support for both classes of schools is provided by local taxes. In the case of a nonprovided (i. e., denominational) school in which fees have hitherto been charged the local authority shall, "while they continue to allow fees to be charged in respect of that school, pay such proportion of those fees as may be agreed upon, or, in default of agreement, determined by the board of education and the managers."

Free tuition.—In the third schedule of the law it is declared that "the duty of a local education authority under the education acts 1870 to 1902, to provide a sufficient amount of public school accommodation, shall include the duty to provide a sufficient amount of public school accommodation without payment of fees in every part of their area."

Definition of elementary school.—The law declares that—

The expression "elementary school" shall not include any school carried on as an evening school under the regulations of the board of education.

The power to provide instruction under the elementary education acts 1870 to 1900 shall, except where those acts expressly provide to the contrary, be limited to the provision in a public elementary school of instruction given under the regulations of the board of education to scholars who, at the close of the school year, will not be more than 16 years of age: *Provided*, That the local education authority may, with the consent of the board of education, extend those limits in the case of any such school if no suitable higher education is available within a reasonable distance of the school.

Higher elementary schools are organized for the purpose of providing more advanced instruction than can be given in the ordinary elementary schools for children between 10 and 15 years of age who are certified by an inspector of the board as qualified to profit by such instruction. The special object which they have in view is to qualify the children taught in them to enter any of those callings in which scientific methods have to be employed. With this intention the course of instruction, though not exclusively scientific, is based on science, and all the scholars are trained to make accurate measurements and to perform and record simple experiments. One foreign language and elementary mathematics are included in the curriculum, while careful attention is given to drawing. The course of instruction extends over four years.

The 66 training colleges for elementary school-teachers (20 for men, 32 for women, and 14 for both men and women) under inspection by the board of education and in receipt of Government grants are also included under the general head of elementary education.

Higher education.—The local education authorities are empowered—

To supply or aid the supply of education other than elementary, and to promote the general coordination of all forms of education, and for that purpose shall apply all or so much as they deem necessary of the residue of the liquor duties under section 1 of the local taxation (customs and excise) act, 1890, and shall carry forward for the like purpose any balance thereof which may remain unexpended, and may spend such further sums as they think fit: *Provided*, That the amount raised by the council of a county for the purpose in any year out of rates (local taxes) under this act shall not exceed the amount which would be produced by a rate of 2d. in the pound, or such higher rate as the county council, with the consent of the local government board, may fix.

Government inspection.—The Government supervision of elementary schools is maintained by an inspectorial service, which has been reorganized in connection with the general changes in administration consequent upon the passage of the law of 1902. The official report says:

Hitherto there has been a senior chief inspector in charge of the metropolitan division and 11 chief inspectors, of whom nine were in charge of the other divisions of England and Wales, and the other two were inspectors of training colleges. The chief inspector, who under the new arrangement takes the place of senior chief inspector, is not attached to any district or division, but has general control over the whole inspectorate of elementary schools and is the channel of communication between the inspectorate and the board. The officers hitherto known as chief inspectors will now be entitled divisional inspectors. They will, as before, be eleven in number, and each of them will be in charge of a geographical division continuous with the area of a group of local education authorities. Each divisional inspector will be, to a large extent, responsible for the inspection of the training colleges within his division. He will be required to supervise in a more specific and effective manner than has hitherto been the case the work of all the district inspectors in his division, and the district assigned to him for his direct inspection will be smaller than that hitherto intrusted to a chief inspector, in order that he may have time for carrying out the increased duties incident to the responsibilities of his post. He will be expected to make himself acquainted by frequent personal visits with the work of each of the inspectors of his division and to hold periodical conferences with all his inspectors, upon which he will furnish reports to the board through the chief inspector in regard to any matters which seem to suggest the desirability of administrative changes. Similarly the chief inspector will visit each divisional inspector as frequently as possible, and will also hold periodical conferences with them as a body, in order that he may be able to place at the disposal of the board the best information and advice which the inspectorate as a whole is in a position to afford. The administration of the board will be largely guided by the expert advice given them in the full sense of the responsibility involved and with full knowledge of local circumstances by the body of inspectors.

It is also expected that the local authorities, or, in particular, the local education committees, will come into close relations with the inspectors and will be guided, in a measure, by their expert knowledge of the school conditions of their respective areas. The inspectorate thus organized pertains to elementary schools exclusively. The similar service for the higher grades of schools that the new law has brought in relation with the central authority has been provided for temporarily, but will probably be organized on a permanent basis in the near future.

PROGRESS IN THE APPLICATION OF THE NEW LAW.

In order to understand the current record of elementary education in England it is necessary to bear in mind the radical changes made in the administration of education by the law of 1902, as indicated in the above epitome of the law. It is also desirable to keep in mind the relation of the law to previous legislation on the same subject, which relation is indicated by the appended chronological epitome of the principal events in the development of the system of education.

From the report of the board of education (central authority) for 1903-4 it appears that rapid progress has been made since 1902 in giving effect to the new law. On August 1, 1904, it had come into operation in every area of local education authority with the exception of six, and in these areas the days for its adoption had been fixed, making it sure that by the end of September the law would be operative in all. Thus, one of the main purposes of the law, namely, a reduction in the number of local authorities responsible for education has been accomplished. In the place of about 800 school-attendance committees and over 2,500 school boards there are now 328 educational authorities (municipal and county councils) for the country outside of London.

The concentration of local authority in a single body in each area has brought a large number of elementary schools, which were formerly isolated units, under one and the same direction as an integral part of the local school provision.

The education law for London, bearing date August 14, 1903, went into effect May 1, 1904, at which time the London county council became the authority for education in the metropolis, excepting as regards certain minor provisions for which the appointed day was October 1. Thus educational administration in the metropolis has been brought into unison with that of the rest of the Kingdom.

With reference to the general effects of these recent acts, the official report calls particular attention to the fact that they have made it possible to deal with the various forms of educational activity as parts of a coordinate whole in each area and that they have already brought within "reasonable distance of solution" problems which could not be solved until such relations were established.

As to the spirit in which the local authorities have entered upon the work, the report states that they "are carrying out their responsible duties, not merely with energy and good will, but with tact and consideration toward the various bodies with whom they were brought into relation."

Special difficulties arise in the local conduct of education in England from causes peculiar to the dual system of schools—i. e., public and private. The newly constituted local authorities have been brought into conflict with the governing bodies and teaching staff of the latter class of schools in a few instances; fewer, however, than was anticipated. For the most part the questions in dispute have been amicably adjusted.

The board of education has encountered some difficulty in respect to the appointment of foundation managers of private schools. The total number of applications received for action in this respect amounts already to 11,538.

The power of grouping schools under one body of managers conferred by the law of 1902 upon the local education authorities has been exercised so far as reported in respect to 514 council schools and 278 voluntary schools. It is believed that grouping has really been effected in many more cases.

The efforts to deal with endowments applicable to elementary education, a task which also devolves upon the local education authority, have disclosed the fact that many of the endowments are not necessarily restricted to elementary education, but may be used to foster higher grade schools. The law of 1902 (section 8) also provides that—

where the local education authority or any persons propose to provide a new public elementary school they shall give public notice of their intention to do so, and that appeals may (within three months after the notice is given) be made to the board against the proposal by the managers of any existing school, by the local education authority, or by any ten ratepayers in the area concerned, on the ground that the proposed school is not required or that a school of a different character would be better suited to meet the wants of the district. In deciding on any such appeal the board are directed by section 9 of the act to

have regard to the interest of secular instruction, to the wishes of parents as to the education of their children, and to the economy of the rates.

The following report of appeals and decisions in this respect is interesting as an indication of the impartial spirit in which the cases have been treated:

Notices under section 8 have been received from—

	Local education authorities.	Other persons.	Total.
New schools	338	75	413
Enlargements	64	39	103
Transfers	244	3	247
Total	646	117	763

The following new schools and enlargements have been sanctioned:

	Council schools.		Church of England schools.		Roman Catholic schools.		Total.	
	Number.	Accommodation.	Number.	Accommodation.	Number.	Accommodation.	Number.	Accommodation.
New schools	136	71,225	15	1,978	3	335	154	73,538
Enlargements	20	5,231	9	1,073	1	130	30	6,434

Appeals have been received against 40 proposed voluntary schools, of which 8 have been successful, 10 unsuccessful, 2 withdrawn, and 20 are awaiting consideration.

Appeals have been received against 32 proposed council schools, of which 5 were unsuccessful, 4 withdrawn, and 23 are awaiting consideration.

In 9 cases it has been necessary to hold public inquiries for the decision of appeals under section 8. The proceedings were in most cases of considerable public interest, and although the questions raised were novel and involved a careful balancing of conflicting considerations, the board have not felt any serious doubt as to the manner in which they should be decided.

STATISTICS OF ELEMENTARY SCHOOLS.

TABLE I.—*Number of elementary schools, by classes and accommodation in each class.*

Classes of schools.	Number of schools.		Number of scholars for whom accommodation is provided.	
	1902.	1903.	1902.	1903.
National Society or Church of England	11,711	11,713	2,813,978	2,826,755
Wesleyan	458	448	183,673	178,022
Roman Catholic	1,056	1,062	403,064	405,555
British and other schools	1,043	1,030	322,887	315,516
Total voluntary or nonprovided schools	14,268	14,253	3,722,427	3,725,858
Board or council schools	5,943	6,011	3,003,247	3,053,629
Grand total	20,211	20,264	6,725,674	6,795,487

From the foregoing table it will be seen that the accommodation in public elementary schools increased by 69,813 places between 1902 and 1903. Of this increase, a little more than half (36,806 places) is due to new schools that have been placed on the list for Government grants. The number of board or council schools—that is, schools under public management—was 518 greater in 1903

than in 1902. Of this increase, 28 schools (10 Church of England, 3 Wesleyan, and 15 undenominational) are schools transferred from private to public control. It is further noticeable that the Roman Catholic and Church of England schools are the only classes of schools under private management that show increase during the year. The former number 6 additional schools and 2,471 additional places; the latter, 2 additional schools and 12,777 additional places.

TABLE II.—*Enrollment and average attendance for successive years 1897-98 to 1902-3.*

Year.	Scholars on registers at end of year.			Average attendance during year.			Percent- age of average attendance to numbers on reg- isters.
	Number over 3 years of age.	Increase.		Number.	Increase.		
		Number.	Per cent.		Number.	Per cent.	
1897-98.....	5,572,868			4,565,831			81.93
1898-99.....	5,650,434	77,566	1.39	4,646,713	80,882	1.77	82.24
1899-1900.....	5,682,887	32,453	.57	4,673,205	26,492	.57	82.23
1900-1901.....	5,758,143	75,256	1.32	4,741,954	68,749	1.47	82.35
1901-2.....	5,881,278	123,135	2.14	4,899,815	157,861	3.33	83.31
1902-3.....	5,975,127	93,849	1.60	5,047,129	147,314	3.01	84.47

As pointed out by the official report, the fluctuations in attendance shown by the above table will be better understood by observing the number of children on the registers between 7 and 11 and over 11 years of age, as shown in the following table:

TABLE III.—*Classification of elementary pupils by age periods.*

Year.	Age 3 to 7.		Age 7 to 11.		Over 11.	
	Number.	Increase (+) or decrease (-).	Number.	Increase.	Number.	Increase.
		Per cent.		Per cent.		Per cent.
1898.....	1,805,672		2,424,112		1,243,084	
1899.....	1,834,889	+1.62	2,446,790	0.94	1,368,755	1.91
1900.....	1,832,438	-.13	2,475,993	1.19	1,374,456	.42
1901.....	1,829,348	-.17	2,499,225	.94	1,429,570	4.01
1902.....	1,839,267	+.54	2,520,684	.86	1,521,327	6.42
1903.....	1,858,590	+1.05	2,538,692	.71	1,577,845	3.72

The report observes in reference to the above statistics of enrollment by age periods, that—

The number of children between the ages of 7 and 11 has increased steadily, though the rate of increase has tended to become smaller; and that the fluctuations are mainly in the numbers of children over 11 and under 7 years of age, respectively.

(1) The number above the age of 11 has increased very considerably in the three years from 1900 to 1903. There can be no doubt that this is mainly due to the act passed in 1889 to amend the law respecting the employment and education of children, and perhaps partly also to the provisions in the elementary education act of 1900 authorizing local authorities to extend the upper limit of compulsory school attendance from the thirteenth to the fourteenth year of age. The effect of this latter act, however, is mainly to be seen in the increased regularity of attendance, the per cent of average attendance to enrollment having risen from 82.3 in 1900-1901 to 84.5 in 1902-3.

(2) The number of pupils between the ages of 3 and 7 shows an actual decrease between 1898-99 and 1900-1901, while the increase in 1901-2 is very small. The board have no knowledge as to the reason of this, but it is possible

that it may have been due to the South African war. The withdrawal of a number of men from the country led to removals of their families, and the younger children may have been kept at home instead of being sent temporarily to new schools. If this is the case, a very large increase may be expected in the year 1903-4 as compared with 1902-3.

The figures may also point to an increasing tendency for children not to attend school until the legal age (7 years) is reached.

The war also may have been the cause to some extent of the diminution of the rate of increase in the number of children over 11 in the year 1899-1900, as many children may have been compelled to leave school prematurely in consequence of the diminished means of subsistence in their families.

Special attention is also called in the report to irregularities in the statistics for successive years due to the use of the terms "infants" and "older scholars." These terms refer to the classification of children for the payment of the Government grants and not to the classification for purposes of instruction. In certain small schools the grant on the average attendance of infants is paid as if they were older scholars, and they are then counted as such for statistical purposes. Hereafter this confusion will be avoided by counting as "infants" for statistical purposes all children who are under instruction as infants.

The ordinary age of promotion from the infants' department or class is between 7 and 8 years, but there has been a steady tendency to lower this age. This tendency has been partially checked since 1900, in which year the regulations introduced the "block grant" and allowed more subjects to be taught in the infant schools.

TABLE IV.—*Number and proportion of children in infant schools and schools for older scholars at specified dates.*

Year.	Infants.		Older scholars.		Percentages of total number of scholars.	
	Number.	Increase.	Number.	Increase.	Infants.	Older scholars.
		<i>Per cent.</i>		<i>Per cent.</i>		
1898	2,008,721	α 0.99	3,564,147	α 1.62	36.04	63.96
1899	2,028,668	α .20	3,621,766	α 2.06	35.90	64.10
1900	2,044,802		3,950,225		34.22	65.78

α Average annual increase.

The tabulated statistics include the schools classified as higher elementary. These number 29 with accommodation for 9,124 pupils, an enrollment of 8,236, and an average attendance of 7,839.

The following statistics summarize information with respect to schools provided for by the elementary education law (blind and deaf children) of 1893:

Schools for blind and deaf children.

Year ended Aug. 31—	Schools and institutions for blind children.			Schools and institutions for deaf children.		
	Number.	Accommodation.	Children on registers.	Number.	Accommodation.	Children on registers.
1899	40	1,795	1,290	61	3,530	2,787
1900	40	1,815	1,463	62	3,586	2,794
1901	40	1,831	1,488	63	3,665	2,807
1902	38	1,651	1,379	61	3,590	2,834
1903	40	1,739	1,453	60	3,579	2,803

The official report presents the following statements with respect to measures for increasing the efficiency of the class of schools included in the above table:

The school authorities who make provision for the education of blind and deaf children are now consolidating small schools into larger ones, to which they are empowered to convey children from a distance at the cost of the rates [local taxes] when the parent is unable to bear the charges of conveyance. Better classification of the children, improved organization, and, consequently, more successful teaching may be expected, and in London these results are already apparent.

There is also a tendency to replace day schools by small boarding institutions. The children are thereby placed under better care and have improved opportunities for drill, games, and a more regular life. More continuous attendance at instruction is also possible in institution schools, and the progress of the scholars is greater.

The future lives of these children are very largely influenced by the education they receive, and the fact that 75 per cent of the blind and 50 per cent of the deaf population of this country are shown by the census of 1901 to be without occupation, indicates the importance of the industrial training of these children. The usual school courses of manual instruction require to be supplemented by higher industrial work, and it is worth notice that several local authorities are now doing this. At the Anerley Institution for older deaf boys advanced woodwork, tailoring, and bootmaking are being taught under approved educational schemes. At Linden Lodge and Elm Court, blind schools for elder boys and girls, respectively, similar schemes are in use. Manchester, Stoke, and Doncaster schools for the deaf, and Birmingham, Leeds, and Sheffield schools for the blind give instruction of a similar character.

An important departure in the work of educating the blind and deaf has been recently taken by the establishment of schools for children who are not only blind or deaf, but are also otherwise defective. For example, at Homerton very useful work is done by the school for feeble-minded deaf mutes, and at Clapton a school has been recently opened for blind children who are mentally defective.

An innovation in all blind and deaf schools during the past year has been the introduction of a progress book showing by half-yearly entries the progress of each child in elementary attainments, manual work, character, good habits, and physical powers.

Some of the institutions for the blind, in their attempt to deal with the industrial side of the work, have, through the local education authorities, applied for power to give education other than elementary. In one case sanction to the proposal has already been granted.

TABLE V.—*Classification of teachers, number and proportion in each class.*

Year	Certified teachers.	Assistant teachers.	Pupil teachers, including probationers.	Total. ^a	Percentage of total teachers. ^a		
					Certified.	Assistant.	Pupil.
1899.....	62,065	30,233	33,349	125,667	49.4	24.1	26.5
1900.....	64,058	32,426	30,991	127,485	50.24	27.3	23.5
1901.....	66,149	34,716	28,002	128,867	51.3	26.9	21.8
1902.....	67,813	36,265	29,218	133,296	50.9	28.8	21.9

^aNot including additional women teachers first employed in 1880 (numbering 17,588 in 1902).

TABLE VI.—*Relation between number of pupils in average attendance and number of adult teachers.*

Year.	Average attendance during year.	Certified teachers in employment at end of year.	Total number of adult teachers in employment at end of year.	Children in average attendance to each certificated teacher.	Children in average attendance to each adult teacher.
1899-1900.....	4,673,205	64,009	113,983	73.01	41.00
1900-1901.....	4,741,954	66,101	118,821	71.74	39.91
1901-2.....	4,899,815	67,768	121,666	72.30	40.27
1902-3.....	5,047,129	70,886	126,977	71.20	39.75

TABLE VII.—Average annual salaries of certificated teachers.

Year.	Masters.					Mistresses.				
	Average salary of—			Percentage in receipt of salaries over £300.		Average salary of—			Percentage in receipt of salaries over £200.	
	Principal teachers.	Assistant teachers.	All teachers.	Principal.	All teachers.	Principal teachers.	Assistant teachers.	All teachers.	Principal.	All teachers.
1870	-----	-----	£94	-----	-----	-----	-----	£57	-----	-----
1875	-----	-----	109	-----	-----	-----	-----	65	-----	-----
1880	-----	-----	121	-----	1.05	-----	-----	73	-----	0.51
1885	£132	£90	121	2.11	1.56	£79	£63	74	2.05	1.34
1890	134	99	120	2.95	2.01	83	66	76	2.75	1.68
1895	138	98	122	3.21	1.97	88	73	81	3.51	1.93
1899	144	102	125	3.54	1.97	94	76	84	3.95	1.85
1900	145.7	-----	-----	3.6	1.9	95.7	-----	-----	4.1	1.9
1901	147.5	-----	128.8	3.8	-----	97.1	-----	86.5	4.2	-----

TABLE VIII.—Expenditure on public elementary education (England and Wales), 1871-1902 (current and capital).

Year.	(a) Paid from rates (local taxes board schools only).	(b) Voluntary subscriptions and income from endowments.	(c) Total of columns (a) and (b).	(d) Fees of scholars in elementary schools and students in training colleges.	(e) Total of columns (a), (b), and (d).	(f) School-board loans for building purposes ^a .	(g) Estimated average annual subscriptions for voluntary school buildings.	(h) Grand total of columns (a), (b), (d), (f), and (g).	(i) State expenditure (education department and science and art department).
1871	£71,184	£509,262	£580,446	£546,421	£1,126,867	£600	£441,201	£1,538,668	£927,524
1872	162,491	581,014	743,505	607,692	1,351,197	63,487	441,201	1,855,885	1,117,878
1873	251,903	642,650	894,556	699,597	1,594,153	861,458	441,201	2,886,812	1,246,851
1874	373,859	709,712	1,083,571	826,244	1,909,815	1,539,111	441,201	3,890,127	1,541,089
1875	588,845	799,387	1,388,232	948,120	2,336,352	1,435,989	441,201	4,213,542	1,496,471
1876	868,418	878,757	1,747,175	1,049,892	2,797,067	1,492,956	441,201	4,701,224	1,642,283
1877	1,108,316	250,564	2,028,880	1,154,909	3,183,789	1,821,330	441,201	5,445,320	1,897,350
1878	1,328,275	918,390	2,246,665	1,292,615	3,539,280	1,500,163	441,201	5,480,644	2,191,017
1879	1,436,250	913,550	2,399,800	1,392,289	3,792,089	1,083,636	441,201	5,316,926	2,348,704
1880	1,579,752	905,612	2,485,364	1,452,792	3,938,156	1,090,258	441,201	5,469,615	2,529,572
1881	1,772,263	897,279	2,669,542	1,530,929	4,200,471	982,151	441,201	5,623,82	2,636,933
1882	1,837,566	893,796	2,731,362	1,607,888	4,339,250	975,215	441,201	5,755,698	2,824,462
1883	1,990,162	891,346	2,881,508	1,684,087	4,565,595	850,051	441,201	5,856,847	2,866,260
1884	2,207,806	913,525	3,121,331	1,759,289	4,880,620	1,171,288	441,201	6,493,108	3,135,843
1885	2,354,036	933,959	3,287,965	1,818,579	5,106,544	1,198,364	441,201	6,745,109	3,295,227
1886	2,545,492	917,080	3,462,572	1,849,382	5,302,954	691,601	441,201	6,435,756	3,745,633
1887	2,641,554	923,985	3,565,539	1,862,042	5,427,581	430,462	441,201	6,299,244	3,511,654
1888	2,631,433	932,403	3,563,836	1,890,537	5,454,373	401,114	441,201	6,296,688	3,606,868
1889	2,666,264	941,748	3,608,012	1,932,607	5,540,619	374,828	441,201	6,553,648	3,684,192
1890	2,938,096	945,114	3,913,210	1,969,032	5,882,242	377,397	441,201	6,700,840	3,741,351
1891	3,331,473	932,113	4,293,586	2,000,676	6,294,262	574,064	441,201	7,309,527	4,185,142
1892	3,462,356	980,342	4,442,698	1,320,405	5,763,103	949,076	441,201	7,153,380	6,092,366
1893	3,619,167	960,012	4,609,179	393,261	5,002,440	914,539	441,201	6,358,180	6,495,841
1894	3,732,342	969,553	4,721,895	360,530	5,082,425	1,557,885	441,201	7,081,511	6,650,969
1895	3,987,790	1,000,993	4,988,783	342,900	5,331,683	1,899,362	441,201	7,642,246	6,963,279
1900	5,557,537	-----	-----	-----	-----	-----	-----	-----	8,973,871
1901	6,331,811	894,123	7,165,934	-----	-----	-----	-----	-----	69,079,686
1902-3	6,243,692	876,360	7,123,052	-----	-----	2,150,797	-----	-----	69,359,404

^a The law of 1870 authorized school boards to borrow money on the security of local taxes (rates) for the building of schoolhouses. Up to the 1st of April, 1901, the education department had sanctioned loans to the amount of £41,624,464 (£208,122,320). The new accommodation thus furnished is sufficient for 2,788,120 children. The estimated cost per child is thus about £14 18s. 7d. (£75). The department has also sanctioned loans to the amount of £132,998 to 10 school boards for providing accommodation for 729 blind and deaf children, and also £26,818 18s. to 5 school boards for providing accommodation for 390 defective children.

^b The grant for this year does not include the grant from the science and art department, which is no longer applied to elementary schools. This grant, now limited to so-called higher schools, amounted in 1902-3 to £649,702. The Government grant to training colleges, not included in the foregoing totals, was £231,989.

TABLE IX.—*Summarized statistics for specified years.^a*

	Year ending August 31—				
	1870. (Revised Code.)	1876.	1890.	1900.	1902.
Schools (institutions) inspected by Her Majesty's inspectors	8,281	14,273	19,419	20,100	20,153
Voluntary schools	8,281	12,677	14,743	14,409	14,275
Board schools	—	1,596	4,676	5,691	5,878
Departments under separate head teachers in those schools	12,061	20,782	23,339	31,234	31,372
Scholars for whom accommodation is provided	1,878,584	3,426,318	5,539,285	6,509,611	6,681,295
Percentage to estimated population	8.80	14.13	18.84	20.28	20.54
Scholars on the school registers	1,693,059	2,943,774	4,804,149	5,636,114	5,881,278
Percentage to estimated population	7.66	12.03	16.34	17.71	18.08
Scholars in actual average attendance	1,152,389	1,984,573	3,717,917	4,666,190	4,788,400
Percentage to estimated population	5.21	8.10	12.64	14.53	14.72
Percentage to scholars on the school registers	68.06	67.42	77.39	82.06	81.41
Average attendance for payment in infant schools and classes	—	—	1,107,805	1,478,211	1,486,023
Average attendance for payment in schools for older scholars	—	—	2,632,731	3,230,236	3,302,377
Average attendance of scholars who earned grants upon examination in class subjects	—	—	2,492,918	3,227,985	—
Scholars qualified for grant in specific subjects	—	—	78,611	330,815	—
Number of departments in which singing was taught:	—	—	—	—	—
By ear	—	16,823	13,054	4,577	2,290
By notes	—	3,815	16,227	26,638	29,077
Number of schools in which were taught—	—	—	—	—	—
Military drill	—	1,056	1,414	2,838	6,437
Manual instruction	—	—	—	1,708	1,749
Science	—	—	—	1,229	—
Physical exercises	—	—	—	9,675	—
Half-time scholars	—	201,234	175,437	89,036	—
School libraries	—	—	4,401	8,114	8,504
Savings banks	—	—	2,498	7,193	7,071
Certificated and provisionally certificated teachers	12,467	22,053	46,539	64,038	67,813
Assistant teachers	1,262	3,173	21,784	32,436	36,265
Additional teachers	—	543	5,210	17,512	17,588
Pupil teachers	14,304	32,231	29,610	29,393	29,218
"Annual grant"	£562,611	£1,816,864	£3,326,177	£4,911,269	£5,275,883

^a The years selected, with one exception, were characterized by the passage of laws organizing or modifying the system. The year 1890 marked the close of two decades under the Forester law and also brought to an issue the efforts that resulted in the law of 1891, providing for the remission of school fees.

CODE (REGULATIONS) FOR ELEMENTARY SCHOOLS FOR 1905.

One of the most important measures of the board of education during the year under review was the issuing of a new code^a or body of regulations determining the conditions under which an elementary school may share in the Government grant.

As compared with former codes, the present code has been greatly simplified by the omission of all matter relative to the instruction and training of teachers, which subjects are dealt with in separate regulations. The course of study, which was formerly presented in two parts, one including obligatory subjects and the other subjects which might be taught under appropriate circumstances, is now presented as a coherent whole with directions as to minimum and maximum requirements.

The present code proposes also a change in the basis on which the Government grant is distributed to the schools—a change which it is believed will have excellent results when it is universally applied. Under this new scheme, which does not go into full operation until after July 31, 1905, the principal part of the Government grant will be allotted on the basis of average attendance, its pro-

^a This code was prepared under the immediate direction of Mr. R. L. Morant, secretary to the board of education, who has given great attention to the subject of chief importance in the code, namely, that of the course of study.

vided by the regulations of 1895, but the distinction between infant schools and schools for older pupils is done away with. In lieu thereof the rate of the grant per capita is graded by the ages of pupils. This change, it is hoped, will tend to prevent the transfer of children from infant schools to the schools for older pupils for the mere purpose of securing larger grants.

Many of the regulations comprised in the code relate to matters peculiar to the English system. The following citations embody provisions having a wider bearing:

INTRODUCTION TO THE CODE.

General purpose of elementary schools.—The purpose of the public elementary school is to form and strengthen the character and to develop the intelligence of the children intrusted to it, and to make the best use of the school years available, in assisting both girls and boys, according to their different needs, to fit themselves, practically as well as intellectually, for the work of life.

With this purpose in view it will be the aim of the school to train the children carefully in habits of observation and clear reasoning, so that they may gain an intelligent acquaintance with some of the facts and laws of nature; to arouse in them a living interest in the ideals and achievements of mankind, and to bring them to some familiarity with the literature and history of their own country; to give them some power over language as an instrument of thought and expression, and, while making them conscious of the limitations of their knowledge, to develop in them such a taste for good reading and thoughtful study as will enable them to increase that knowledge in after years by their own efforts.

The school must at the same time encourage to the utmost the children's natural activities of hand and eye by suitable forms of practical work and manual instruction, and afford them every opportunity for the healthy development of their bodies, not only by training them in appropriate physical exercises and encouraging them in organized games, but also by instructing them in the working of some of the simpler laws of health.

It will be an important though subsidiary object of the school to discover individual children who show promise of exceptional capacity, and to develop their special gifts (so far as this can be done without sacrificing the interests of the majority of the children), so that they may be qualified to pass at the proper age into secondary schools, and be able to derive the maximum of benefit from the education there offered them.

And although their opportunities are but brief, the teachers can yet do much to lay the foundations of conduct. They can endeavor, by example and influence, aided by the sense of discipline which should pervade the school, to implant in the children habits of industry, self-control, and courageous perseverance in the face of difficulties; they can teach them to reverence what is noble, to be ready for self-sacrifice, and to strive their utmost after purity and truth; they can foster a strong respect for duty, and that consideration and respect for others which must be the foundation of unselfishness and the true basis of all good manners; while the corporate life of the school, especially in the playground, should develop that instinct for fair play and for loyalty to one another which is the germ of a wider sense of honor in later life.

In all these endeavors the school should enlist, as far as possible, the interest and cooperation of the parents and the home in an united effort to enable the children not merely to reach their full development as individuals, but also to become upright and useful members of the community in which they live and worthy sons and daughters of the country to which they belong.

ARTICLES OF THE NEW CODE.

CHAPTER I.—*Course of instruction, syllabus, and time-table.*

1. The education given in every public elementary school should be based on a graduated course of instruction, suitable to the age and capacity of the scholars, in the following subjects:

(1) *The English language*, including speaking with correct pronunciation, reading aloud with intelligence and clear enunciation, writing, oral and written composition, and grammar. At each stage recitation of pieces of literary merit should be practiced.

(2) *Arithmetic*, including practice in oral and written descriptions of the processes used.

(3) *Knowledge of the common phenomena of the external world*, with special reference to the formation of a habit of intelligent and accurate observation, and to the application of that habit—in conjunction with simple forms of experiment—in the daily life and surroundings of the scholars.

(4) *Geography*, advancing from first notions to an outline knowledge of the chief physical features of the earth, and specially of the British Isles, and the British dominions beyond the seas.

(5) *History*, comprising a general knowledge of the great persons and events in English history and of the growth of the British Empire.

(6) *Drawing*, including drawing from actual objects, memory drawing, and brush drawing, together with other simple hand and eye training.

(7) *Singing*, which should, as a rule, be taught by note and should include practice in proper breathing.

(8) *Physical exercises*, according to an improved system.

(9) *Plain needlework* for girls, including in the later years lessons in cutting out.

See also Article 4.

It is desirable that as far as possible subjects (1) to (6) should be taught in relation to each other and with reference to the surroundings of the children. The instruction should afford frequent opportunities for the practice of oral and written composition.

Part of the instruction of infants should be given by means of appropriate and varied occupations, and to a less extent the same methods should find a place in the teaching of the younger scholars (article 3). Instruction in history and geography need not be given to infants.

One or more of the above subjects of instruction may be partly or wholly omitted in any class in which the board are satisfied that there is good reason for the omission.

2. The instruction under article 1 must be in accordance with a syllabus which the inspector may require to be submitted to him at any time. The board may require the modification of any portion of the syllabus which is considered unsuitable.

The syllabus should show the amount of time allotted to each subject and should ordinarily provide for a full year's instruction, but that year need not be identical with the school year (article 27) or with the educational year adopted for any special subject (Schedule III, rule 1).

3. The classification of scholars for instruction under article 1 should not be based on a precise separation according to age; but scholars who, at the close of the course of instruction for the year, will not have completed their seventh year should generally be regarded as "infants." Other scholars should generally be regarded as "younger scholars" until the close of the year of instruction in which they complete their eleventh year, and afterwards should generally be regarded as "older scholars."

4. Instruction in the following subjects (for which special grants are made on conditions specified) may also be given to scholars in the upper classes under the regulations prescribed, where adequate equipment and efficient teachers are available:

For boys, handicraft, gardening, and (in schools in seaport towns, with the special consent of the board) cookery.

For girls, cookery, laundry work, dairy work, and household management.

5. One or two subjects other than those named in articles 1 and 4 may often be taught with advantage to older scholars. The inspector will satisfy himself (1) that any subject thus taken is suitable to the age, circumstances, and capacities of those scholars who take it; (2) that it can be taken without interfering with the general course of instruction; (3) that it can be efficiently taught, and (4) that the instruction will be given in accordance with a suitably graduated scheme.

6. Instruction may be given in religious subjects, but no grant is made in respect of such instruction. (Section 97 (1), elementary education act, 1870.)

7. The time during which instruction is given in each subject taken under this code, whether at the school or elsewhere, must be entered in the time-table and is subject to the approval of the inspector on behalf of the board.

The time-table must be open at any reasonable time, except the ordinary school hours, to the inspection of the parent of any scholar attending the school who makes a written application to see it.

The time-table must be kept permanently and conspicuously affixed in every schoolroom. (Section 7 (2), elementary education act, 1870.)

CHAPTER II.—*Teaching staff.*

THE HEAD TEACHER.

8. Every school or department must have a head teacher, who should be held responsible for the general control and supervision of the instruction and discipline.

A school may consist of one or more "departments," and, for the purposes of this code, the board have power to determine whether any part of a school is or is not a department.

9. The head teacher must be a certificated teacher, except in the following cases:

(a) The head teacher of a school with an average attendance of not more than 50 scholars may be a provisionally certificated teacher.

(b) The head teacher of a school with an average attendance of not more than 40 scholars may be an uncertificated teacher provided the Inspector reports (1) that such teacher is specially qualified to take charge of the school in question and (2) that the school is so circumstanced that it is difficult to obtain a certificated teacher.

(c) The head teacher may, with the special approval of the board, be a retired army schoolmaster recommended for that purpose by the war office.

If a school or department which is already on the annual grant list is kept open and the registers are duly marked, grants will be payable in respect of any period (not being more than three months exclusive of the ordinary school holidays) between the leaving of one and the coming of another head teacher qualified under this article.

THE STAFF.

10. The school or department must have a sufficient and suitable staff.

The "staff" of a school or department consists, for the purposes of this code, of all the teachers whose employment in the school or department is recognized by the board (see articles 11 and 15).

In considering the sufficiency and suitability of the staff the board will have regard to the arrangement of the premises for teaching purposes, the number of children in attendance, their organization and proficiency, the nature of the approved course of instruction, the qualification of each member of the staff, and his suitability for the work assigned to him.

11. In order to be recognized on the staff of a school or department a teacher other than the head teacher must (with the exceptions named in the two following paragraphs) be a certificated teacher, a provisionally certificated teacher, or an uncertificated teacher.

(a) For the present supplementary teachers and pupil-teachers may be recognized on the staff, and provisional assistant teachers and probationers who have obtained recognition before August 1, 1904, may continue to serve under the regulations of the provisional code, 1903, and to form part of the staff of the school or department.

(b) Where vacancies in the office of any teacher other than the head teacher occur in the course of the school year and are duly reported to the board, young persons may be employed temporarily as monitors in place of the teachers causing the vacancies and may be recognized temporarily as part of the school staff, each monitor being accepted as equivalent to a pupil-teacher. Such vacancies must always be supplied by the appointment of duly qualified teachers as soon as possible and in no case later than the first day of the next school year.

(c) No person who is a member of, or is employed otherwise than in teaching by, a local education authority, school board, or school attendance committee, as the case may be, can, as a rule, be recognized as part of the staff of any school within the area of such authority.

(d) No person who is a clerk in holy orders or the regular minister of a congregation can be recognized as part of the staff of a school or department for the purposes of this code.

12. (a) In no case will a staff be considered sufficient if it is not at least equivalent for the average attendance measured by the following scale:

	Children in average attendance.
The head teacher.....	50
Each assistant teacher certificated.....	60
Each assistant teacher (uncertificated or provisionally certificated).....	45
Each supplementary teacher.....	30
Each provisional assistant teacher.....	30
Each pupil-teacher.....	30
Each probationer.....	20

The above scale must not be understood to indicate that a school thus staffed is necessarily efficient. In every case the circumstances of the individual school will be considered in relation to the educational conditions of the area, and the sufficiency of the staff thus tested will be a condition precedent to a grant.^a

(b) For the purpose of article 32 the following scale is substituted for that given in (a) above:

	Children in average attendance.
The head teacher.....	40
Each assistant teacher certificated.....	40
Each assistant teacher (uncertificated or provisionally certificated).....	30
Each supplementary teacher.....	20
Each provisional assistant teacher.....	20
Each pupil-teacher.....	20
Each probationer.....	10

INFANTS' DIVISIONS.

13. An infants' division with an average attendance exceeding 50 must be under the charge of a certificated teacher of its own, and an infants' division with an average attendance exceeding 30 must be under the charge of a teacher over 18 years of age approved for the purpose by the inspector.

No grant will be paid in respect of any period longer than three months (exclusive of the ordinary school holidays) during which the division has been without such a teacher.

If a department contains both infants and other scholars, the infants taken together form the "infants' division."

SIZE OF CLASSES.

14. The grant may be withheld if it is found that the number of scholars habitually present at any one time under the instruction of any teacher or teachers exceeds by more than 15 per cent the number for which such teacher or teachers is or are equivalent, according to the scale of article 12 (a).

CONDITIONS OF EMPLOYMENT.

15. All teachers must be employed under written agreements, except that in the case of a school provided by a local authority a teacher other than a pupil-teacher may be employed under a minute of the authority.

(a) Any agreement or minute of appointment dated on or after August 1, 1904, under which a teacher other than a pupil-teacher is employed in a public elementary school, must include, either expressly or by reference to this article of the code, one or other of the alternative clauses set out below:

The board will not recognize, as part of the staff of a school or department, any teacher other than a pupil-teacher unless this condition is complied with.

*Clause (1).—*The teacher shall not be required to perform any duties except such as are connected with the work of the school, or to abstain, outside the school hours, from any occupations which do not interfere with the due performance of his duties as teacher of the public elementary school.

*Clause (2).—*The teacher shall not be required to perform any duties except such as are connected with the work of the school and with the instruction of pupil teachers and probationers, or to abstain, outside the school hours, from any occupations which do not interfere with the due performance of his duties

^a This article does not apply to Greenwich Hospital or to marine schools.

as teacher of the public elementary school or with the instruction of pupil-teachers and probationers.

(b) Clause (2) must only be included if the teacher is required to instruct pupil-teachers or probationers who are not receiving instruction in a center recognized by the board. In other cases clause (1) must be included.

(c) Subsection (a) of this article does not apply to marine schools or to schools which are attached to institutions in which children are boarded and lodged.

(d) The agreements of pupil-teachers must conform to the regulations for the instruction and training of pupil-teachers.

* * * * *

CHAPTER III.—*Premises, accommodation, and equipment.*

17. Before placing a school on the list of schools in receipt of annual grant and before recognizing any enlargements or alterations (other than minor alterations as defined below) of the premises of a school already on that list, the board must be satisfied by the submission of plans, drawn in accordance with the prescribed requirements, that the building rules are complied with.

The recognized accommodation, or maximum number of scholars in average attendance for which the premises are suitable, will be determined by the board, in the case of new buildings or of alterations or enlargements, from the approved plans. * * *

18. As a condition of retaining a school on the list of schools in receipt of annual grant the board may, from time to time, require such alterations as may, in their opinion, be necessary to secure that the premises shall be safe in case of fire, shall have suitable and sufficient sanitary and cloak-room accommodation for the scholars in attendance, shall be capable of being properly lighted, warmed, drained, and ventilated, and shall be adequate, and suitably arranged for the instruction of the children in attendance according to their age.

The recognized accommodation of a school may from time to time be revised by the board, and there shall in no case be less than 80 cubic feet of internal space and 8 square feet of internal area for each unit of the number of children in average attendance for which the school is recognized.

19. The number of scholars in average attendance should not exceed the recognized accommodation, and if the inspector finds at any visit to a school that the premises and offices are not kept in a clean and healthy condition, or that any room is habitually used for a larger number of scholars than that for which it is passed by the board, he will at once report accordingly.

20. The board may from time to time require provision to be made for the adequate and suitable equipment of the school with desks, furniture, books, maps, and other apparatus of elementary instruction.

CHAPTER IV.—*Inspection and reports.*

21. Every public elementary school is inspected from time to time by the board. An inspector may visit at any time any public elementary school or place where the scholars of a public elementary school are receiving instruction under the code.

A school must have been visited by an inspector during the course of any period for which grant is claimed; but the state of the school will not necessarily be the subject of a detailed report each year by an inspector.

22. The inspector, where he considers it desirable, may hold an oral or written examination of any class in the school on the work done in the class since the commencement of the current year of instruction. Such examination, when held, will be arranged by the inspector after consultation with the head teacher, and after consideration of any examinations which have been held during that period by the head teacher or the teacher of the class; and the inspector will confer with the head teacher as to the length of notice desirable before the examination is held.

23. Any report of an inspector, and any remarks made thereon by the board for communication to the managers of the school, must as soon as received be copied verbatim into the log book and signed by the correspondent.

24. The term "inspector," where used in this code, means exclusively one of His Majesty's inspectors of schools or any other person employed by the board for the purpose of inspection.

CHAPTER V.—*Exchequer grants in aid and annual grant list.*

25. There is annually voted by Parliament, for the purposes of elementary education in England and Wales, a sum of money to be administered by the board of education, in this code referred to as the "board."

From this sum are paid:

(a) The special aid grant payable under section 10 of the education act, 1902,^a regulations for the payment of which can be obtained by local education authorities.

(b) The fee grant payable under the elementary education act, 1891.

(c) The "annual grants" in respect of individual public elementary schools [as provided for specially]. * * *

The board's decision as to the fulfillment of such of these conditions as are not directly imposed by act of Parliament, is final and conclusive so far as regards the payment of grant. * * *

GRANT ON ACCOUNT OF AVERAGE ATTENDANCE.

31. For school years ending on or after August 31, 1905, grants will be payable at the following rates subject to article 30:

(a) Fifteen shillings for each unit of the average attendance of children between 3 and 5 years of age; 20s. for each unit of the average attendance of children between 5 and 12 years of age; 25s. for each unit of the average attendance of children between 12 and 15 years of age.

(b) If the total average attendance of a department containing both infants and other scholars does not exceed 45, the board may make an additional grant of 2s. for each unit of the average attendance.

SPECIAL GRANTS TO SCHOOLS IN AREAS WITH SMALL POPULATIONS.

32. Where the population of the parish^b in which any public elementary school is situate, of the population within 2 miles, measured according to the nearest road from the school, is less than 500, and there is no other public elementary school recognized by the board as available for that parish, or that population, as the case may be, the board may make a special grant, in addition to all other grants, at the rate of £10 a year if the said population is not less than 300, at the rate of £20 a year if the said population is less than 300 and exceeds 200, or at the rate of £25 a year if the said population does not exceed 200; provided that in each case, as to £10 a year, no grant under this article is payable in respect of any period during which the staff has not satisfied the conditions of article 12 (b), subject to the conditions of articles 9 and 11 (b) as to vacancies. * * *

^a Section 10 of the education act, 1902, is as follows:

Aid grant.

10. (1) In lieu of the grants under the voluntary schools act, 1897, and under section ninety-seven of the elementary education act, 1870, as amended by the elementary education act, 1897, there shall be annually paid to every local education authority, out of moneys provided by Parliament—

(a) A sum equal to four shillings per scholar; and

(b) An additional sum of three halfpence per scholar for every complete twopence per scholar by which the amount which would be produced by a penny rate on the area of the authority falls short of ten shillings a scholar: *Provided*, That in estimating the produce of a penny rate in the area of a local education authority not being a county borough, the rate shall be calculated upon the county rate basis, which, in cases where part only of a parish is situated in the area of the local education authority, shall be apportioned in such manner as the board of education think just.

But if in any year the total amount of parliamentary grants payable to a local education authority would make the amount payable out of other sources by that authority on account of their expenses under this part of this act less than the amount which would be produced at a rate of threepence in the pound, the parliamentary grants shall be decreased, and the amount payable out of other sources shall be increased by a sum equal in each case to half the difference.

(2) For the purposes of this section the number of scholars shall be taken to be the number of scholars in average attendance, as computed by the board of education, in public elementary schools maintained by the authority.

^b For "parish" read "school district" (elementary education act, 1870, secs. 4 and 10) in the case of areas where the education act, 1902, is not operative.

GRANTS FOR SPECIAL INSTRUCTION.

34. If courses of instruction in the subjects named in article 4 are given according to specified regulations, grants are payable at the following rates in respect of scholars who have within the respective educational years for those subjects made the required attendance:

Rate of grant for each scholar who has made the required attendance.

	Shillings.
Cookery-----	4
Laundry work-----	2
Dairy work-----	4
Gardening (longer course)-----	4
Gardening (shorter course)-----	2
Handicraft-----	7

For household management the rate of grant is 9d. for every complete ten hours of the aggregate number of hours of attendance made in the educational year. Not more than 230 hours' attendance in the educational year may be included in the aggregate for any one girl, in respect of this subject.

35. If the board are satisfied that by reason of an approved change in the educational year or the closure of a school under medical authority, the satisfaction of the minimum attendance requirements in the case of cookery, laundry work, dairy work, gardening, or handicraft has been prevented, they may pay a grant at a rate proportionate to the part of the course completed, the minimum requirements being correspondingly reduced.

The grant for household management in a similar case shall be payable with no reduction in the rate, provided that the teacher has given a due proportion of the minimum number of hours of instruction required in a full course. * * *

CHAPTER VI.—Higher elementary schools.

The other articles of this code are applicable to higher elementary schools, except so far as a contrary intention appears from the terms of this chapter.

A public elementary school may be recognized by the board as a higher elementary school under the following conditions:

38. (1) Before a school can be recognized as a higher elementary school a curriculum and time-table must be submitted for the approval of the board and such other information as the board may require must be supplied. The curriculum must be approved by the board, and must show that a sufficiency of science instruction, both practical and theoretical, is provided for in each year.

(2) The premises must be specially equipped for practical instruction, and must be recognized by the board as suitable for the purposes of a higher elementary school.

(3) The school must be shown, to the satisfaction of the board, to be necessary, having regard to the circumstances of the particular locality.

(4) The school must be organized to give a complete four years' course of instruction approved by the board.

39. (1) A child proposed for admission to a higher elementary school must (a) be not less than ten years of age at the date of admission; (b) have, as a rule, been for at least two years under instruction at a public elementary school, and (c) be shown to the satisfaction of the inspector to be qualified to profit by the instruction offered in the higher elementary school.

(2) Scholars newly admitted into a higher elementary school must, except with the express sanction of the inspector, commence with the first-year course; but this rule does not apply to scholars who are receiving instruction in a school at the time of its conversion into a higher elementary school.

(3) The inspector must be satisfied of the fitness of any child to continue or to be promoted from one year's course to another in a higher elementary school.

(4) The number of scholars in a higher elementary school will, as a rule, be limited to about 350, except in the case of a school of science, or a school under the secondary school regulations of the board, being converted into a higher elementary school.

40. (1) Attendances may not be recognized in a higher elementary school for any scholar who is upward of 15 years of age.

(2) No scholar may remain in a higher elementary school beyond the close of the school year in which he or she is 15 years old. But scholars who are

receiving instruction in a school at the time of its conversion into a higher elementary school may remain with the sanction of the board of education.

(3) No scholar attending a higher elementary school may attend an evening school or class under the regulations of the board.

(4) Separate registers must be kept for the higher elementary school, and no grant may be received from the board in respect of a higher elementary school in addition to the grants named in article 42, with the exception of the fee grant and the special aid grant under section 40^a of the education act, 1902.

41. (1) The teaching staff of the school must be approved by the board as capable of giving the instruction provided in the school curriculum. The recognition of a teacher will not be continued if the inspector is unable to report favorably on his or her qualifications. An assistant teacher engaged to teach science must possess a special qualification recognized by the board. Supplementary teachers and pupil teachers will not be recognized on the staff of a higher elementary school.

(2) Persons recognized under previous codes as head or assistant teachers may continue to be so recognized, subject to the favorable report of the inspector.

(3) No member of the teaching staff, unless with the previous approval of the board, may undertake duties not connected with the school which may occupy any part whatever of the school hours.

(4) The numbers of a class should be, as a rule, confined to thirty-five, and may not exceed forty. There must be a teacher for every class, and a laboratory should be, as a rule, in charge of a teacher of its own.

42. The grants made for higher elementary schools are as follows:

	Higher scale.	Lower scale.
First year	s. 35	s. 31
Second year	47	43
Third year	65	55
Fourth year	90	73

The board shall decide which, if either, of these grants shall be paid, in the case of each year's course, after considering the report and recommendation of the inspector upon each of the following four points:

(a) The suitability of the instruction to the circumstances of the scholars and the neighborhood.

(b) The thoroughness and intelligence with which the instruction is given.

(c) The sufficiency and suitability of the staff.

(d) The discipline and organization.

The inspector will recommend the higher grant unless he is unable to report favorably upon the school under these heads.

The sum named in this article is in each case the amount of a year's grant for each unit of average attendance; but for the purpose of reckoning the average attendance at a higher elementary school an attendance shall mean attendance during two and a half hours.

CHAPTER VII.—Attendance, school meetings, etc.

43. "Attendance," for the purpose of ascertaining the average attendance of a school other than a higher elementary school, shall be reckoned exclusively in accordance with the following regulations:

(a) No attendance may be reckoned for any scholar under 3 or over 15 years of age or for any scholar while habitually employed as a monitor;

(b) For each infant present at secular instruction during one school meeting for a period of not less than one hour and a half there will be reckoned one attendance;

(c) For each scholar other than an infant scholar present at secular instruction during one school meeting for a period of not less than two hours there will be reckoned one attendance; and

(d) For each such scholar who is a half-time scholar there will be reckoned, in addition, half an attendance, subject to the following limitation:

The total of the additional attendances allowed in the case of any half-time

^a See footnote p. 816.

scholar shall not exceed such a number as will, when added to the number of his two-hour attendances during the school year or portion of the year which has elapsed since he became a half-time scholar, exceed three-fourths of the number of the school openings in the corresponding period.

The term "half-time scholar" means a scholar certified by the local authority to be employed in conformity with the by-laws, or, if not subject to the by-laws, in conformity with the elementary education act, 1876, or any other act regulating the education of children employed in labor, and in either case recognized by the board as a half-time scholar.

The term "local authority" means the local education authority acting under the education (London) act, 1903, or under Part III of the education act, 1902, where that act is in operation, and elsewhere the school board or school attendance committee, as the case may be.

44. In making up the minimum time constituting an attendance there may be reckoned—

(1) Any time occupied by instruction, according to the approved time-table, given to the scholars elsewhere than at the school, in one of the subjects named in article 4, in drawing, in science, in physical exercises, or in any other subject specially recognized by the board for the purpose of this article.

(2) Any time occupied by visits paid during the school hours, with the sanction of the inspector, and under arrangements approved by him, to places of educational value or interest, provided that the whole time spent at such place or places be not less than one hour and a half; but not more than twenty attendances made up of such visits shall be reckoned for any one scholar in the same school year.

(3) Any time occupied by a central examination (other than for labor certificates) attended by scholars with the sanction of the inspector, provided that the time allowed for examination be not less than one hour and a half.

(4) Any time occupied in attending at a training college or center for pupil teachers for the purpose of model or criticism lessons.

The minimum time constituting an attendance must include an interval of ten minutes for recreation, and, if the meeting be of three, or, in the case of infants, of two and a half hours' duration, the interval may be fifteen minutes.

45. The school or department must have met not less than 400 times in the school year.

(a) If in consequence of a change of school year the grant is payable for a period other than twelve months, or a school has only been on the annual grant list for a period forming part of a school year, the number of meetings required under this article is to be altered in proportion to the length of the period.

(b) If there has been a closure under medical authority, or for any other unavoidable cause, the number of meetings required is proportionately decreased.

(c) In making up the required number of meetings there may be included, if necessary, the number of meetings which would ordinarily have been made during times when the school premises were temporarily used, under section 6 of the ballot act, 1872, for an election, or under any other statutory power.

In the case of Greenwich Hospital School and marine schools this article will not be applied.

46. The "average attendance" of any section of a school or department for which a separate return is necessary, for a school year or any other period for which a grant is payable, is the quotient of the total number of attendances made during that period, divided by the number of meetings during such period, a fraction of a unit being ignored or reckoned as an additional unit according as it is or is not less than one-half.

PRINCIPAL DATES IN THE HISTORY OF THE SYSTEM OF ELEMENTARY EDUCATION, ENGLAND.

1833. First grant (£20,000) made by Parliament for elementary education in England and Wales to be administered by the national and British foreign school societies (annually renewed).

1838. Committee of House of Commons appointed to investigate the education of the poorer classes.

1839. Committee of council on education established; annual grant increased to £30,000.

1846. Minutes issued by council on education recognizing definitely denominational schools and denominational training colleges for teachers; pupil-teacher system recognized.

1847. Commission of inquiry into education in Wales.

1858-1861. Duke of Newcastle's commission on state of popular education.

1861. Code (Lowe's) issued establishing system of payment by results (i. e., of examination of individual pupils).
1870. Elementary education act (Forster's) passed.
1876. Amending act passed establishing the compulsory principle and creating school attendance committees for its enforcement in districts having no school board.
1880. Law obliging local educational authorities to make by-laws for the enforcement of compulsory school attendance.
1891. Law providing for an extra grant for schools remitting tuition fees.
1893. (1) Law making 11 years the minimum age for exemption from school attendance, and requiring an examination in a grade not lower than the fourth for every child seeking exemption from school attendance; (2) law authorizing school boards to make special provision for the elementary instruction of blind children and of deaf and dumb children.
1897. Law providing a special grant for the benefit of "voluntary" (chiefly denominational) schools at the rate of 5s. per capita of average attendance; also authorizing the federation of voluntary schools and the allotment of the grant at the discretion of the governing bodies of the federations.
1899. (1) Law (defective and epileptic children's act) "empowering local educational authorities, at their discretion, to establish special schools or classes for mentally or physically defective children and special boarding institutions for juvenile epileptics;" (2) law raising the minimum age for exemption from school attendance from 11 to 12 years; (3) creating a board of education to replace "the education department and the science and art department, providing also for the transfer to the new board of certain powers exercised by the charity commissioners with respect to educational trusts and endowments, and for the transfer to the board of the educational functions of the board of agriculture." Further, the law authorizes "a consultative committee, to be constituted by an order in council, consisting of persons qualified to represent the views of universities and other bodies interested in education for the purpose of framing, with the approval of the board of education, a register of teachers and of advising the board of education on any matter referred to them by the board." The law also authorizes the board "to inspect any school supplying secondary education and desiring to be so inspected."
1900. Law authorizing local authorities to extend the upper limit of compulsory attendance from the thirteenth to the fourteenth year of age.
1902. Law reorganizing the national system of education, abolishing elected school boards, and transferring their duties to county and municipal councils. (London excepted.)
1903. Law reorganizing system of education in London on the lines of law of 1902.
- Auxiliary legislation.*—1889–1891: Technical instruction laws authorizing county councils to levy a tax not exceeding a penny in the pound for the support of technical schools. 1890: Local taxation, customs, and excise law, placing the surplus of the liquor duties at the disposal of county councils, with the privilege of applying the same to technical instruction.

Principal measures relative to curriculum of elementary schools as determined by the specified codes (the code is a body of regulations annually issued, and as it receives the sanction of Parliament it has the same force as the laws).

1882. The policy of payment upon results modified by introduction of a merit grant at the rate of 1s. to 3s. per capita on the basis of average attendance.
1893. Evening schools recognized as continuation schools and a wide choice of subjects permitted.
1895. For the system of annual formal examinations the substitution of two annual visits by the inspector, to be made without notice; average attendance recognized as the basis for the distribution of nearly the whole Government grant for elementary schools.
1903. Code greatly simplified and the curriculum unified and strengthened.

SYSTEM OF PUBLIC EDUCATION IN SCOTLAND.

Brief conspectus of the system.—The system of education in Scotland was organized by a law of 1872 on a basis similar to that of the English system as regards support from the public treasury and the Government inspection of

schools. Scotland had, however, a system of public schools dating from a law of 1696, which required that a school be established in every parish. The country was thus prepared for a system of universal school boards as provided for by the law of 1872. The law differed also from the English law of 1870 in that, following the traditions of the old parish system, it made provision for both elementary and secondary schools. The latter did not share in the treasury grant, but by subsequent laws were allowed support from local taxes. Whereas compulsion has been gradually introduced into the English system, the Scotch law made education compulsory for all children between the ages of 5 and 13 (raised to 14 in 1883), or until a certificate of exemption should be secured. The standard or grade for exemption was made the fifth (law of 1878); the age for exemption is 12 (law of July, 1899).

A law of 1901 strengthened the compulsory measures without, however, changing the age limits.

Religious instruction in the schools of Scotland was left to local authorities, with the simple restriction of a conscience clause making the attendance of children at the religious exercises optional with the parents. A grant in lieu of fees (law of 1889) has had the effect of making the schools practically free schools.

By the regulations for 1899-1900 a standard of attainment—that of the merit certificate—was fixed, which was regarded as the satisfactory outcome of an elementary school course. The merit certificate—called also the leaving certificate—of the elementary school entitled the holder to exemption from further attendance upon school. Under these circumstances it was found desirable to increase the requirements for the certificate, and in 1903 a supplementary course was arranged, which candidates for the merit certificate were obliged to pursue at least one year. At the same time the requirements for transfer to a secondary school were arranged on a somewhat different basis. The supplementary course must provide for the instruction of the pupils according to a well-graduated scheme in the following subjects: English (including history and geography), mathematics (including arithmetic), at least one language other than English, and science and drawing, according to a scheme approved for the leaving-certificate examination in these subjects.

In 1885 the Scotch education department arranged for the inspection of endowed and other secondary schools applying for the service. In 1888 the department established a leaving certificate for students who, on the completion of a course of secondary study, pass the certificate examination.

The number of secondary schools inviting inspection in 1903 was 94, of which 32 were higher class public schools, 24 endowed schools, and 38 private schools. The number of candidates for the leaving certificate in 1888 was 972; in 1903 it was 19,509.

A large number of university and professional authorities accept the certificate in lieu of such preliminary examinations as are held under their direction. Through the service of inspection and examination the secondary schools of Scotland have been brought into close relation with the education department.

Under the local taxation (customs and excise) act of 1890, and other acts providing for the application of public funds to secondary and technical education, the local authorities expended for these purposes in 1901-2 the sum of £58,407 (\$292,035).

March 27, 1904, a bill to amend the education laws of Scotland was introduced into the House of Commons. Like the English law of 1902, it pertained chiefly to the local control of schools; in particular the bill proposed to make the county or county district the unit of local administration in place of the parish. The bill was, however, withdrawn at the close of the session.

Comparative statistics of elementary education in Scotland.

	Years.					
	1872.	1880.	1890.	1900.	1901.	1903.
Estimated population	3,395,802	3,705,314	4,109,275	4,324,944	4,472,000	4,571,030
Number of schools	1,979	3,064	3,076	3,135	3,141	3,149
Departments:						
Day	2,133	3,377	3,405	3,592	3,609	-----
Higher grade				31	34	-----
Evening continuation	68	277	191	952	1,032	-----
Accommodation:						
Day schools	281,638	602,054	714,865	893,842	911,398	933,009
Higher grade				9,292	9,721	10,299
Evening continuation schools (not connected with day schools)		1,361	420	5,064	10,574	-----
Number on the registers:						
Day schools		534,428	664,466	753,287	763,903	780,818
Higher grade schools				3,271	3,518	4,548
Evening continuation schools		20,279	16,524	82,190	87,599	-----
Average attendance:						
Day scholars	213,549	404,618	512,690	623,089	633,104	664,741
Higher grade scholars				2,940	3,270	4,548
Evening continuation scholars	3,653	14,297	11,636	43,962	47,002	-----
Number of teachers:						
Certificated	2,566	5,330	7,745	10,845	11,268	12,195
Assistant		444	1,320	2,418	2,606	2,555
Pupil	3,642	4,582	3,883	3,926	4,035	4,165
Queen's scholars in training colleges ^a	729	892	861	1,250	1,360*	1,385
Queen's students ^b				110	132	193
Current expenditures		\$4,122,879	-----	£87,436,752	£89,063,215	£89,609,970

^a Termed King's scholars in training colleges since the accession of Edward VII.^b Termed King's students since the accession of Edward VII.^c For day schools only.

EDUCATION IN IRELAND.

*System of national education (elementary).—*The system of national education in Ireland dates from 1831, when a board of commissioners for education was created by the Government. In 1845 the board was incorporated by royal charter, and in 1861 a supplemental charter was granted, under which 10 members must be Roman Catholics and 10 Protestants. The board is composed always of representative men, who adhere to the policy of strict impartiality in religious matters. One member of the board of commissioners, the resident commissioner, is a salaried officer. He is the official head of the education department, with offices at Dublin. Upon him rests the responsibility for carrying out the details of the system of national education and also the administration of the Government appropriations for the same. The schools under the supervision and fostering care of the board are supported by State and local funds. They may be denominational schools (i. e. Roman Catholic or Protestant) or mixed in respect to religion, but the rights of parents in the matter are strictly guarded by a conscience clause in the school regulations, which provides that no child be allowed to attend a religious exercise of a denomination other than his own, except upon the written request of the parent.

Grants to aid in building schoolhouses are allowed by the commissioners, but must be proportioned to the amount raised locally. The State pays also the larger proportion of the salaries of teachers, requiring a minimum annual

augmentation from local funds of £12 (\$60). Altogether the State bears about 94 per cent of the annual expenditure for the schools.

To avoid religious complications the State provides the text-books for secular branches, which are issued at a small cost to the pupils.

For purposes of Government supervision the country is divided into 60 districts, which are grouped in 6 divisions, each in charge of a head inspector. Under these are 29 district inspectors, 7 unassigned inspectors, and 10 inspectors' assistants. Inspectors and their assistants are appointed upon examination testing their scholastic and professional qualifications.

Local civil authorities have no control over the schools. The local managers of schools, who are generally clergymen, come into direct relations with the board of commissioners. They appoint and dismiss teachers and arrange the details of the school work. Of a total of 2,936 managers in 1902, 2,363 were clerical.

The commissioners have direct control of a special class of schools called "model schools," for which they provide the buildings. "These schools, as their name indicates, are intended to afford models of the best methods of instruction and organization, and to serve as practice schools for students in training colleges or normal schools." They numbered 30 in 1902, with an enrollment of 8,969 day pupils, included in the enrollment given in the table below.

A compulsory school law was passed in 1892, but it has been imperfectly enforced, and Ireland still stands below the other divisions of the United Kingdom in respect to school attendance, as is shown by the most recent statistics. These give the following rates of attendance to enrollment:

	Per cent.
England-----	82.3
Wales-----	77.9
Scotland-----	85.2
Ireland-----	70.8

Convent and monastery schools afford a large part of the provision for elementary education, and receive, under certain conditions, aid from the Government.

The number of such schools fulfilling the conditions for aid reported in 1902 was 373, with an enrollment of 110,769.

The schools of the Christian Brothers form a large part of the provision for elementary education, especially in the cities, where their schools are both numerous and flourishing. Their system of education has taken deep hold upon the people, and they number among their former pupils the most influential men in every city and large town of Ireland.

For the training of teachers for the national schools there are one national and six denominational normal schools, which receive grants in aid from the Government. They report 1,090 students in training in 1903. Of the 13,144 teachers employed in the national schools in 1903, 57.2 per cent had received professional training.

Provision for agricultural instruction is an important feature of the national system. Instruction in the theory of agriculture is compulsory in all rural schools for boys in the fourth, fifth, and sixth classes, and optional for girls.

Complaint is made that the instruction in this branch has been altogether too bookish; recent efforts are directed to putting it on a practical basis.

The commissioners maintain also two model agricultural schools, and in 1897 they reported 38 school farms in connection with elementary schools and 116 schools having school gardens attached.

The following tables summarize the principal statistics of the national elementary schools for the years named:

Year.	Number of schools in operation.	Average number of pupils on rolls.	Average daily attendance.	Percentage of average daily attendance to average number on rolls.
1888	8,196	846,533	493,883	58.3
1892	8,403	815,972	495,254	60.7
1898	8,651	808,467	518,799	64.2
1899	8,670	796,163	513,852	64.5
1900	8,648	770,622	478,224	62.0
1901	8,692	754,028	482,031	63.9
1902	8,712	747,864	487,098	65.1
1903	8,720	741,795	482,489	65.0

The elementary schools are classified with respect to religious denomination as unmixed, i. e., attended by Roman Catholic children exclusively or by Protestant children exclusively, and mixed schools, which are attended by Roman Catholic and Protestant children.

The tendency to diminish the number of mixed schools is indicated by the percentages of such schools at different dates, as follows:

	Per cent of mixed schools.		Per cent of mixed schools.
1878	56.5	1897	38.4
1882	54.0	1902	34.3
1887	49.4	1903	33.1
1892	45.6		

Number and classification of teachers in 1887 and in 1903.

TEACHING FORCE.

	1887.	1903.		1887.	1903.
Principals:			Junior assistants	44	11
Males	4,672	4,656	Manual instructresses		560
Females	3,278	3,599	Work mistresses and industrial teachers	539	502
Total	7,950	8,255			
Assistants:			Temporary assistants:		
Males	867	1,088	Males	59	5
Females	2,341	2,699	Females	91	23
Total	3,208	3,787	Total	150	28
Total principals and assistants	11,159	12,042	Temporary workmistresses	27	1
			Gross totals	11,918	13,144

The payment of pensions for national school teachers was provided for in 1879 by an act of Parliament.

Expenditure on schools and teaching staffs.—According to the report of the commissioners for the year ending December 31, 1903, the aggregate annual expenditure on the schools from all sources, including Parliamentary grant, school fees, and local subscriptions, amounted to £1,287,963 9s. 11d., as shown in the following table. This would give an average of £2 13s. 11½d. for each child in average daily attendance during the year.

The income was derived as follows:

	£	s.	d.
(a) From state grants:			
Grant for primary education-----	1,210,524	17	7
(b) From local sources:			
Subscriptions and endowments, etc. (toward	£	s.	d.
incomes of teachers)-----	20,253	1	6
Subscriptions toward repairs, etc-----	55,056	6	7
School pence-----	2,132	4	3
		77,438	12 4
Total annual income of schools from all sources----	1,287,963	9	11
Rate per pupil from (a) state grants-----	2	10	8½
Rate per pupil from (b) local sources-----	0	3	3
Rate per pupil from all sources-----	2	13	11½

In addition to the expenditure for the maintenance of the schools, as above stated, the sum of £25,303 11s. 7d. was paid out of rate for board of public works for buildings, repairs, etc., of vested schools, and £29,347 2s. 9d. contributed from local sources toward the erection of new buildings, etc.

Grants are made to evening schools in which instruction in the subjects of the day school programmes may be given to persons over 18 years of age and to children unable to attend day schools. There are now upward of 1,300 evening schools, with about 26,000 pupils, and the state expenditure upon these has come to over £20,000 in one year, according to latest returns.

Secondary and technical education.—An intermediate education board was established in 1878 for the examination of intermediate or secondary pupils. In 1902 the number of candidates for examination was 8,379 (6,087 boys and 2,292 girls), as compared with 9,073 in 1898 and 6,952 in 1881. There was paid to the managers of the schools the sum of \$287,565 (£57,513) on the results of the examination.

The annual income of the intermediate education board is made up of the interest on a Government fund of £1,000,000, placed at the disposal of the board, which yielded in 1903 interest amounting to £27,500 (\$137,500), and a sum from the Irish share of the customs and excise duties, which averages about £50,000 (\$250,000) annually.

Technical instruction in Ireland is controlled by the department of agriculture and technical instruction, which has an advisory board of technical instruction. The income of the department consists of an annual appropriation of £166,000 and the interest on an original endowment of £205,000. The department aims at the coordination of its work with that of other educational authorities, and in 1901–2 its programme of experimental science was adopted in 152 secondary schools, with 6,412 science pupils. Central institutions under the department are the Royal College of Science, Dublin, and the Metropolitan School of Art, the former of which is being, and the latter is about to be, reorganized. Throughout Ireland technical instruction is being organized under the councils of county boroughs, urban districts, and counties. In Dublin and Belfast in 1902 there were upward of 4,000 students attending the technical schools of the councils. The department is required to appropriate £55,000 annually for technical education. Of this amount £25,000 is allotted to county boroughs and £30,000 for similar purposes elsewhere, the equivalent grants being continued for three years to institutions which had formerly received them.

Proposed reform of the national system of education.—The national system of education briefly outlined above is not satisfactory to the Irish people themselves nor to the Government. The mere fact that the system is not of indigenous origin deprives it of the hearty support of the people, and it is now clearly

recognized by those in authority that radical changes are needed to adapt it to existing conditions and modern demands.

Under this conviction the English Government has recently ordered special investigations of the various divisions of the work. In 1901 a corps of special inspectors was appointed to investigate and report upon the schools aided by the intermediate education board of Ireland. The report of this commission gives detailed information with respect to the schools specified and offers suggestions as to needed improvements. In 1904 a special investigation of the elementary schools of Ireland was ordered by the Government and the task committed to Mr. F. H. Dale, His Majesty's inspector of schools, under the board of education. Mr. Dale was instructed in particular to report how the "typical Irish elementary day schools compared with similarly circumstanced public elementary schools in England as regards premises, equipment, staffing, and instruction, and to what causes deficiencies in economy appear to be chiefly due." The investigation as thus outlined was carried out very thoroughly and systematically, and Mr. Dale's report gives full information upon all the points specified. The emphasis placed upon the comparison between Irish and English schools indicates very clearly the intention of the Government to raise the former to full equality with the latter. At present, as Mr. Dale's report makes clear, the Irish town schools are inferior to the English in respect to all the particulars named, excepting only the qualifications of the teachers themselves. Here Ireland has an advantage over England in the requirement that the head teacher of every school should be trained; furthermore, only adult teachers are recognized in Ireland as part of the school staff. The Irish monitors, unlike the English pupil teachers, have no responsibility with respect either to teaching or discipline. Until a very recent date the salaries of Irish teachers were inferior to those of their English confrères, but recent regulations have improved the financial condition of the former. The greatest drawback to the efficiency of the Irish system is declared by Mr. Dale to be the failure to devolve any financial responsibility on the locality, or to provide sufficient inducement to persons of position and education to take part in the work of school management. It is noticeable that a remedy for this evil suggested by Mr. Dale is in the line of the recent reform of school administration in England. In order to create wider local interest in the schools he advises that they be grouped "under some responsible authority to which the distribution of the state grant could be intrusted subject to supervision by the central office."

The "model schools," which form so marked a feature of the national system in Ireland, are not, according to Mr. Dale, fulfilling the purpose indicated by their title. In his opinion these schools might, however, be developed on the same plan as the higher elementary schools of England, and thus meet the urgent demand for the means of prolonging the education of pupils who are able to continue their studies up to about 16 years of age.

It is evident from the two investigations above referred to that many essentials of a comprehensive system of public education have already been provided in Ireland, but in their present form they lack coordination, efficient direction, and unified purpose. Mr. Dale lays special stress upon the need of the "closest cooperation between the boards of national, intermediate, and technical education, respectively." On account of the absence of any local educational authority in Ireland, "it appears to be specially necessary," he says, "that the proceedings of any one of the central boards should be conducted with constant reference to the possibility of satisfying, without damage to its own aims, the needs of the other branch of education."

The problem of educational administration in Ireland has thus, it appears,

reached the same stage as the corresponding problem in England and in Scotland. So far no measure has been advised for the needed unification and reform of the Irish system, but events indicate speedy action in this respect.

Higher education.—The oldest institution for superior instruction in the island is the University of Dublin (Trinity College), chartered by Queen Elizabeth.

Besides the arts faculty, schools of law, divinity, medicine, and engineering are comprised in this foundation. Roman Catholics were not permitted to take degrees in the university until 1793, when the disability was removed by an act of Parliament. Eighty years passed before they were allowed recognition in the election for fellowships or for scholarships on the foundation of the college. Meanwhile, in 1854, a class of nonfoundation scholarships was established which were not restricted to any religious denomination. The final abolition of "tests," excepting in the case of professors and lecturers in the faculty of theology, was accomplished by act of Parliament in 1873, through the direct efforts of Mr. Fawcett, at that time postmaster-general. It is needless to say that Dublin University enjoys a prestige which even those who have suffered from its intolerance in the past recognize with pride.

Until 1850 the University of Dublin was the only body in Ireland authorized by law to confer degrees.

In 1849 three institutions, called Queen's Colleges, were established by the Government at Cork, Belfast, and Galway, respectively, for the avowed purpose of maintaining purely secular instruction. In pursuance of this purpose the colleges were organized with faculties of arts, engineering, law, and medicine, theology being excluded. Parliament voted the money for buildings and equipment, and an annual appropriation of £7,000 (\$34,000) for each foundation. In the following year the work was completed by the creation of the Queen's University in Ireland, empowered to conduct degree examinations for the students of the Queen's Colleges. In 1879 this foundation was abolished and the Royal University created in its place. The examinations and degrees of this university are open to all candidates, women included. Alexandra College, founded in 1866 for the higher education of women, prepares women for the degree examinations.

The fellows of the Royal University may be required to teach matriculated students of the university in educational institutions approved by the senate. The following are the approved institutions: Queen's College, Belfast; Queen's College, Cork; Queen's College, Galway; Catholic University College, Dublin (now known as the University College, Dublin); Magee Presbyterian College, Londonderry.

There are two other important institutions concerned with higher education in Ireland, namely, the Roman Catholic Ecclesiastical College of St. Patrick, Maynooth, and the Royal College of Science, in Dublin.

The Catholic majority have for many years complained that the existing university system does not make satisfactory provision for the higher education of Catholics, and a royal commission was recently appointed to inquire into the present condition of the higher, general, and technical education available in Ireland outside Trinity College, Dublin, and to report as to what reforms, if any, are desirable in order to render that education adequate to the needs of the Irish people.

No further action has as yet been taken by the Government, but the report of the commission, which advocated full university advantages for women, gave a new impetus to the efforts for admitting women to Trinity College. These

efforts were brought to successful issue the present year when the board of Trinity College passed a resolution, subsequently sanctioned by the King, which admits women to all degrees of Trinity College in arts and in medicine on the same terms as men.

INVESTIGATIONS RELATING TO PHYSICAL TRAINING AND PHYSICAL DETERIORATION IN
GREAT BRITAIN.

Problems of school administration which for more than a decade have absorbed public attention in Great Britain to the neglect of other educational interests having been disposed of for the time at least, questions pertaining to the improvement of the young are now exciting chief interest. Among these questions that of the physical condition of the children of the masses has been uppermost during the current year.

A royal commission on physical training in Scotland, appointed in 1902, produced startling evidence of the low physical condition of school children in the classes where food is scanty and the living conditions generally bad. The report of the commission is convincing on this point because of the extent and thoroughness of its investigations. Not less than 1,200 children (i. e., 600 in Edinburgh and 600 in Aberdeen) were examined by two well-known physicians—Dr. Matthew Hay, professor of forensic medicine, University of Aberdeen, medical officer of health, Aberdeen, and Dr. W. Leslie Mackenzie, medical inspector for the local government board of Scotland.

In order to insure that the children examined should represent fairly the different social grades of the population, schools were selected "from the poorest and most crowded districts of each city, from the middle-class districts, and from the better-class districts."

The examinations were undertaken with special reference to the fitness of the children for the physical exercises required in the school and the effects of those exercises upon the children, but incidentally the investigation showed also the relation between the physical condition of the children and their capacity for the ordinary school work. The superior capacity of the well-fed children over the underfed for effort of all kinds was conclusively proved.

The conclusions reached by Doctor Mackenzie are thus summed up:

"First. The large number of serious and minor diseases directly and indirectly affecting physical efficiency and mental efficiency constitutes an overwhelming case for a medical inspection of school children.

"Second. The facts as to physical exercise at the various schools demonstrate that a primary condition of any good result from increased physical training is adequate food and adequate clothing.

"Third. No systematic exercise ought to be practiced or enforced without a preliminary medical examination of the vital organs, to insure that irreparable damage shall not result.

"Fourth. That exercises should be organized, not as at present according to the code standard in which the child is studying, but strictly in accordance with health, physical development, and vigor."

As a result of the report of the investigation of the commission on physical training a committee was appointed by the education department of Scotland to investigate the systems of physical training in use in schools and to draw up a "model course of physical exercises" suitable for children of school age.

The outcome of the work of this committee is an extensive report^a setting

^a Report of the interdepartmental committee on the model course of physical exercises, 1904.

forth the general purpose and method of their investigation, together with an extensive syllabus of physical exercises which they offer as capable of adaptation to schools of various classes. The introduction to this syllabus has a universal value because of its lucid and discriminating discussion of the purpose and essential features of a system of physical training adapted to the use of school children.

The report of the Scottish commission on physical training which was published in March, 1903, excited widespread attention and was one of the causes that led to the appointment, in September, 1903, of an interdepartmental committee to inquire into the causes of the alleged deterioration of certain classes of the population in England, "as shown by the large percentage of rejections for physical causes of recruits for the army and by other evidence, especially the report of the royal commission on physical training (Scotland), and to consider in what manner the medical profession can best be consulted on the subject with a view to the appointment of a royal commission, and the terms of reference to such a commission if appointed."

The committee was instructed to determine the steps that should be taken to furnish the Government and the nation at large with periodical data for a comparative estimate of the health and physique of the people; to indicate the causes of such physical deterioration as does exist in certain classes, and to point out the means by which it can be most effectually diminished.

The investigations of this committee had a much wider range than the conditions of school life. They endeavored, indeed, to probe all the influences that tend to degeneracy in any one of its various forms. The public health, as is shown by the investigation, is open to many influences, but by no channel can it be approached so readily or with such wide-reaching effects as by that of the school, and by no other means can the causes of decadence be so successfully attacked. To quote the report:^a "In a country without compulsory military service the period of school life offers the State its only opportunity for taking stock of the physique of the whole population and securing to its profit the conditions most favorable to healthy development. It has been shown in the first part of this report how the occasion may be utilized in furtherance of the objects of an anthropometric survey, and it remains to be considered what are the conditions of school life adverse to physical well-being, and how the opportunities which it presents can be made to realize the best results for the rising generation at, perhaps, the most sensitive period of its growth."

The committee were agreed that the general effects of school life are not prejudicial to health. They cite in this connection the testimony of competent witnesses, in particular Doctors Eicholz and Niven as to the civilizing influence exercised by the school during the last thirty years. "The untamed savagery characteristic of certain types has disappeared," they say, "but popular opinion required educating on such elementary though important points as the seating of children, the arrangement of light, and the supply of fresh air. Evidence was given of children being kept too long at desks which do not fit them, in an attitude of strained attention, either writing or with their eyes concentrated on a blackboard, which, if the class happens to be a large one, perforce occupies a position in which some have a difficulty in seeing it. Very young children are sometimes observed sleeping in postures calculated to develop curvature, and infant occupations are criticised as often much too fine for their eyesight. It was also alleged that the eyes of scholars often suffered from the effects of a strong cross light and that defective ventilation counted for a great deal among the unfavorable circumstances with which children had to cope."

^a Report of the interdepartmental committee on physical deterioration, 1904, p. 9.

With respect to the schools for children of tender years the committee express the opinion that "infant schools as conducted in urban districts can no doubt be worked to the great physical advantage of the children attending them, but there is evidence that a handful of small children in a rural school necessarily suffer a good deal from neglect or are taught under conditions from which no advantage can be derived." Several witnesses were quoted as opposing the admission to school of children under 7 years of age. In particular, Sir John Gorst, former chief of the education department, expressed the opinion that this should be the rule for all country children, and he supported his opinion by the example of Switzerland, which is, he said, "perhaps almost the best educated country in the world. They do not let their children come to school till they are 7. They run about in the villages and mountain sides, and they are often employed in looking after cattle, goats, and so on. They do not go into school at all till they are 7 years old, and therefore when they do go to school they are sturdy and strong and their observation is awakened."

The various schemes proposed for promoting the physical well-being of school children all emphasize the need of medical inspection for schools. On this point the committee consider "that a systematized medical inspection of school children should be imposed as a public duty on every school authority, and they agree with the recommendation of the royal commission on physical training (Scotland) that a contribution toward the cost should be made out of the parliamentary vote." The question of the feeding of school children was thoroughly canvassed by the committee, who present the evidence relating to this subject under the following heads:

"(a) The extent to which underfeeding prevails at present.

"(b) Existing voluntary methods of providing food.

"(c) Proposals in regard to the more systematic feeding of school children."

As regards the first point, the committee were convinced that a large number of children habitually attend school ill fed.

The alleviation of this evil has been left thus far to private efforts, confined for the most part to the larger cities. On the part of the persons engaged in this work "there was," says the report, "a general consensus of opinion that the time has come when the State should realize the necessity of insuring adequate nourishment to children in attendance at school; it was said to be the height of cruelty to subject half-starved children to the processes of education, besides being a short-sighted policy, in that the progress of such children is inadequate and disappointing; and it was, further, the subject of general agreement that, as a rule, no purely voluntary association could successfully cope with the full extent of the evil. Even those witnesses who were inclined to think that its magnitude had been much exaggerated did not question the advisability of feeding, by some means or other, those children who are underfed, provided it could be done quietly and without impairing parental responsibility. The only witness who appeared absolutely to dissent from that view was the Bishop of Ross, who, while admitting an enormous number of underfed children in Ireland, deprecated that it would weaken the sense of self-respect and self-reliance both of parent and child."

The following citation from the report summarizes the information presented before the committee as to the existing agencies for supplying food to underfed school children:

"Existing voluntary methods of providing food.—There has not been a great amount of definite evidence on the voluntary agencies in existence. As regards London, Doctor Eicholz mentioned the following agencies which spend about £6,100 per annum collectively: London Schools Dinner Association, Mr. G. R. Sims, Referee Fund, Destitute Children's Dinner Society, East Lambeth

Teachers' School Dinner Association, Southwark Children's Free Meals Fund. The work of these agencies has been coordinated, so far as the board schools are concerned, by the joint committee on underfed children, which has worked under theegis of the school board."

The committee express the opinion that:

340. In regard to the sum contributed by the parents, Doctor Eichholz said that it amounted to 5 per cent in the case of the London Schools Dinner Association, and 25 per cent in the case of the Destitute Children's Dinner Society.

341. Mr. Libby, who is secretary to the East Lambeth Teachers' Schools Dinner Association, gave a description of the working of the free-meal fund in connection with the association. The fund has been running about twelve years, and is conducted on business lines; it is worked by the teachers through the attendance officers, and careful inquiries are made as to the circumstances of each family before a child is given a meal. There are breakfast centers and dinner centers. A child can be given a pint of vegetable soup and a piece of brown bread and a piece of cake at the cost of 1d. About 2 per cent of the children pay the full 1d., some pay part of the cost, and the rest nothing; not more than 7 or 8 per cent pay anything at all; but Mr. Libby thought this small percentage was due to the thing not being sufficiently worked. In spite of the fund there are still many underfed children, because there is not sufficient organization; it is difficult to get sufficient organization by voluntary methods.

342. Mr. J. B. Atkins, the London editor of the Manchester Guardian, gave a description of the free feeding system in Manchester. There the funds are derived entirely from voluntary sources; but the school board recognized the charity and the teachers helped in distributing the food, etc. The movement has grown steadily, and in 1902, 139,000 free dinners were given, at the cost of a little over £400. In this case also the circumstances of the family are carefully investigated by the attendance officers, but no attempt is made to recover payment from the parents.

343. In Glasgow Doctor Chalmers said there is an institution called the "Poor Children's Dinner Table," by means of which the condition of every child is inquired into, and meals are given to the underfed; the system is very comprehensive apparently, so that "no child in Glasgow ought ever to go to school starving," but no detailed account was given to the committee. Sir Frederick Maurice, however, referred to the Glasgow system and stated that the difficulty as to parental responsibility had there been solved by means of a very thorough system of investigation, and that the applications for gratuitous food have diminished rather than increased.

344. Free meals are given in Edinburgh to about 2,000 children, but the evidence given by Doctor and Mrs. Mackenzie makes it doubtful whether this number by any means exhausts the number of children who are underfed.

345. The most complete scheme described was started by the late Mr. George Dixon, and has now been in operation for twenty years in Birmingham, with Doctor Airy, H. M. L., as chairman of the organization. In considering the principles on which they would act it was decided in the first place that only those should be helped who could expect practically nothing if it was not given to them; and secondly, that only such a meal should be given as would not compete in any way with the meal which could be provided even in a very poor home. It was next decided that cases for help should be selected with the greatest care. This is done by three different people—by the head teacher of the school, by the class teacher in whose class the boy or girl is, and by the visiting officer. The cooperation of these three, Doctor Airy states, has been so successful that he does not believe there has been 5 per cent or anything like it of abuse. The number of children fed in normal times is 2,500 and the plan pursued is thus described:

"We began with ten centers. We had large coppers for soup at ten centers, to which the children came from all outlying schools. The school board allowed us in each of those centers to canvas off some 20 or 30 yards of playground, perhaps 5 yards wide, and the cooking was done at one end. There the soup, a good lentil soup with some animal stock, and the bread and jam, were prepared. The process was simply this. We had to do everything to simplify matters. It had to be a rough business, but it was an effective one. The children come, and form file, and then they walk up, and as they walk up they take a spoon out of a basket and go up to where the voluntary helpers are distributing the soup. They take their bowl of soup and go on to benches on the other side of the canvassed shed and sit down and eat their soup. The moment they have done

they put their basin and spoon into another basket, and as they go out they take a large slab of bread and jam, and eat that in the street. The school board allowed us to do this without any rent, and they gave us the gas. Then the cooking of those meals is done by paid labor, but the distribution is done by the voluntary help of ladies at each center. There is a rota at each center and there are two ladies who attend each day. Our manager I will refer to directly—he is a most capable, suggestive man. We were very much distressed at the fact that the children would come a mile or a mile and half to eat this poor dinner, and they would come through slush and snow and wet, and we wanted to prevent that. A system of baskets was invented. There is a system of baskets at present in use by which the soup can be kept absolutely hot for more than an hour. I have tried it at both ends, and I find it is almost as hot as when it comes out of the copper. We reduced the number of centers to four or five, and now all the outlying schools send their baskets with a paper saying how many dinners they want. Those dinners are put into the baskets at a quarter to 12 or 12 o'clock, and then the staff of the school help in distributing the meals at that school."

346. The committee have thought it worth while to print this part of Doctor Airy's evidence in the body of the report because of the remarkable economic fact with which he concludes:

"We give that dinner, a large bowl of soup—in fact, they have two or three bowls if they like—and a large slab of bread and jam, for less than a halfpenny, and in that expense is included £150 or £100 a year to the manager."

347. He attributed this result (1) to the concentration of the population that has to be helped, (2) to the good will and assistance of the local authority, and (3) to the organizing skill of "a heaven-born manager," a retired naval officer, and to the cooperation of volunteers. In addition to those dinners, which provide for some 2½ per cent of the children of school age, breakfasts, consisting of cocoa, milk, and bread, are supplied by the bounty of a private individual to the necessitous children in about 20 schools in Birmingham, as Doctor Airy believed, under similar conditions. The testimony of the teachers is unanimous that the system pursued enables the children to do the ordinary school work, and they report that the difference is perfectly extraordinary.

The committee express the opinion that—

in a large number of cases voluntary organizations with the support and oversight of the local authority are sufficient for the purpose, and as long as this is so the committee would strongly deprecate recourse being had to direct municipal assistance.

360. Circumstances, however, do arise which call for more immediate aid, and in which the school authority, taking into account the difficulty in the way of home provision of suitable food and the number of children who attend school habitually underfed, are willing to provide regular and sufficient meals, and in such cases the committee agree with the opinion of the royal commission on physical training (Scotland), that "the preparation and cooking of these meals, where it is found necessary to provide them, ought to be regarded as one of the charges incident to school management."

361. By a differentiation of function on these terms—the school authority to supply and organize the machinery, the benevolent to furnish the material—a working adjustment between the privileges of charity and the obligations of the community might be reached.

362. In some districts it still may be the case that such an arrangement would prove inadequate; the extent or the concentration of poverty might be too great for the resources of local charity, and in these, subject to the consent of the board of education, it might be expedient to permit the application of municipal aid on a larger scale. As a corollary to the exercise of such powers—which should be by scheme sanctioned by the board—the law would have to be altered so as to furnish means, as was suggested in evidence, to compel the neglectful parent to take his full share of responsibility, and the committee are sanguine that a few prosecutions to this end would have a most salutary and stimulating effect.

CHAPTER XIII.

HIGHER EDUCATION IN ENGLAND AS AFFECTED BY THE LAW OF 1902.^a

TOPICAL OUTLINE.

The law of 1902 in its relation to "higher" education.—Present status of secondary schools in England.—Regulations for secondary schools issued by the board of education for 1905.—Statistics of "higher" (i. e., secondary, technical, and evening) schools.—Action of local authorities in respect to "higher" education.—Provision for secondary education in Sheffield and in Liverpool as set forth in reports by Mr. Michael Sadler.—Secondary education in London as disclosed by special investigations in 1892 and by Mr. Sidney Webb in 1903.—Chronological epitome of movement in England for organizing secondary education.

THE LAW OF 1902 IN ITS RELATION TO HIGHER EDUCATION.

The education law of 1902 marks an important stage in the development of the English system of public education. As regards elementary education, the provisions of the law and its operations for the two years that have elapsed since it took effect have been considered in the preceding chapter. The law, however, reaches much further than this limited field. It recognizes the public responsibility in respect to the provision of schools of a higher grade than the elementary and places upon local authorities definite obligations in this matter. Hence, with the exception only of the education law of 1870, it is the most important measure ever adopted by the Government in the interests of public education.

The term "higher education" as used in the law of 1902 corresponds in part to the term "secondary" as used in this country; but under the heading, "Higher education," the English law contemplates a variety of institutions, namely, secondary schools distinctively recognized as such, science and art schools receiving Government grants, and evening schools, covering collectively a wider range than the secondary schools of the United States.

The local authorities for higher education are the same as for the elementary schools—i. e., county and borough councils, a provision which makes it possible to correlate and equalize the educational provision in each administrative area.

As stated in the brief epitome of the law already given,^b the councils are authorized to supply or aid the supply of education other than elementary. For this purpose they have at their disposal two sources of revenue, namely, (1) the surplus of the liquor duties as provided by a law of 1890, (2) revenues from

^a For previous articles on the higher (i. e., secondary and technical) schools of England see index on p. 799.

^b For full provision respecting the powers conferred upon the local authorities with respect to higher education see Parts II and IV, law of 1902, published in the Commissioner's Report for 1902, pp. 1018, 1024, 1025; for epitome of these provisions see p. 803 of the present Report.

local taxes (rates) which they may levy for the purpose. Thus the law provides for the increase of the means of "higher education," while careful also to conserve whatever has been already achieved in this direction by municipal or private effort.

The measures adopted by the local councils for carrying out these provisions of the law must have the approval of the board of education, which also has organized a service of inspection for the higher school. Furthermore, the board exercises a general control over the whole work through the regulations (codes) defining the classes of institutions that may be recognized as higher and determining the conditions upon which they may have a right to Government inspection or to Government grants.

It will be seen that in dealing with this department of education the law limits itself to matters of general administration and scholastic classification, leaving all further responsibility to the local authorities. In the two years that have elapsed since the passage of the law little more has been done by the board of education in this matter than to formulate the regulations above referred to and take over the work formerly in charge of the science and art department and the educational duties of the charity commissioners. The councils, upon whom the more onerous task devolves, have done little more than arrange for the continuance of the evening schools, formerly under the school boards, and investigate the actual status of their respective areas in regard to the supply of secondary schools and higher institutions. To complete this survey it will therefore be necessary to consider (1) the regulations issued by the Government for secondary schools distinctively recognized as such; (2) the summarized report of schools under Government inspection or aided by Government; (3) accounts of the preliminary investigations in specified areas.

For the better understanding of the situation as regards the existing schools which are or may be affected by the new measures, the considerations specified are here introduced by a brief account of secondary education quoted from an official statement prepared for the St. Louis Exposition.

SECONDARY SCHOOLS.

In spite of many warnings as to the necessity for the organization of secondary education, up to the present day the relations of public authorities, both central and local, with secondary schools have been much less close than those with elementary education. The secondary schools may be divided into four classes: (a) The public schools (i. e., the seven principal schools, viz. Eton, Winchester, Westminster, Charterhouse, Harrow, Rugby, Shrewsbury) dealt with by the public schools act of 1868 and certain others popularly associated with them; (b) the endowed schools (i. e., the endowed secondary grammar schools administered under the endowed schools act of 1869); (c) schools established and controlled by local authorities; (d) schools carried on by private enterprise. It is hardly possible to give an exact definition of a public school, but the term includes all the most important older foundations which maintain very close relations with the ancient universities of Oxford and Cambridge. They are mainly, though not exclusively, boarding schools, and thus are differentiated from the endowed schools, which, though admitting boarders, have a strong local connection. Educationally, the endowed schools were under the control of the charity commissioners, whose powers in this respect have now been transferred to the board of education. These powers included that of making schemes for the general conduct of such schools, and for organizing administrative inspection to see that these schemes were properly executed, but they did not include any authority to grant financial assistance. This defect was to some extent remedied by the action of the science and art department, whose grants could be earned by schools complying with their regulations. Both from this source and from the funds administered by the county councils under the technical instruction acts, considerable financial aid has been given in recent years to secondary schools. In many places there probably still exists a considerable deficiency in this grade of education, but the duty of providing a

fitting remedy is laid by the act of 1902 upon the new authorities. It may be noted that the greatest part of the provision of girls' education is still made by private enterprise.

Hitherto no special qualifications have been demanded of secondary teachers. High academic qualifications unaccompanied by any professional preparation have sufficed to open the best posts in the teaching profession to men leaving the old universities. But with the establishment of the register of teachers under the act of 1899 this state of things will cease. After the present transitory arrangements have been withdrawn, no teacher will be able to be placed on that register without affording proof of distinct preparation for the practice of his profession.

In the matter of secondary education, Wales has received a different, and, as some maintain, a preferential treatment. It was unusually poor in endowed schools, and the opportunities for secondary education were few. Through the disinterested zeal of one or two individuals, a bill was introduced into Parliament in 1889, and carried with the support of the Government. By this act the treasury undertook to pay to each county and county borough a subsidy not exceeding in amount the sum raised by local rates for the purposes of intermediate education. Through the operation of this act within a very few years the principality has been provided with an excellent system of secondary schools. For the maintenance of an equal standard of attainment throughout the country, a system of inspection and examination has been established, and placed under the control of a central board, to which each county and county borough sends delegates. This organization has been allowed to retain its full powers under the act of 1902.

REGULATIONS FOR SECONDARY SCHOOLS ISSUED BY THE BOARD OF EDUCATION FOR 1905.

In the regulations respecting secondary schools issued in 1903 the board of education were careful to define the limits of secondary education, and in so doing clearly recognized the distinction between secondary schools and technical institutes and classes; thus the authority of the Government has been won for those who advocate an extended course of general education as a prerequisite to specialized training.

The term "secondary" as defined by the board applies to "any day or boarding school which offers to each of its scholars, up to and beyond the age of 16, a general education, physical, mental, and moral, given through a complete graded course of instruction of wider scope and more advanced degree than that given in elementary schools."

As being essential to this course of instruction, the following points are emphasized:

(a) The instruction must be general—i. e., must be such as gives a reasonable degree of exercise and development to the whole of the faculties, and does not confine this development to a particular channel, whether that of pure and applied science, of literary and linguistic study, or of that kind of acquirement which is directed simply at fitting a boy or girl to enter business in a subordinate capacity with some previous knowledge of what he or she will be set to do. A secondary school should keep in view the development and exercise of all the faculties involved in these different kinds of training, and will fail to give a sound general education to its scholars in so far as it sends them out, whether to further study or to the business of life, with one or other of these faculties neglected, or with one developed at the expense of the rest. Specialization in any of these directions should only begin after the general education has been carried to a point at which the habit of exercising all these faculties has been formed and a certain solid basis for life has been laid in acquaintance with the structure and laws of the physical world, in the accurate use of thought and language, and in practical ability to begin dealing with affairs.

(b) The course of instruction must be complete—i. e., must be so planned as to lead up to a definite standard of acquirement in the various branches of instruction indicated above, and not stop short at a merely superficial introduction to any of them. Secondary schools are of different types suited to the different requirements of the scholars, to their place in the social organization.

and to the means of the parents and the age at which the regular education of the scholars is obliged to stop short, as well as to the occupations and opportunities of development to which they may or should look forward in later life. But in no case can the course of a secondary school be considered complete which is not so planned as to carry on the scholars to such a point as they may reasonably be expected to reach at the age of 16. It may begin at the age of 8 or 9 or even earlier. Scholars may pass into it from elementary schools at various ages beyond this up to 12 or 13, and in schools of a high grade which give an education leading directly on to the universities it may be continued up to the age, even, of 18 or 19. But as a rule the years from 12 or 13 up to 16 or 17 will be those during which it is most important that it should be carried on in accordance with a systematic and complete scheme.

(c) The instruction must be graded in its various branches. A defect which is notorious in many schools is that in certain subjects (often from causes for which the school authorities are not responsible) instruction of the scholars is cut down to "marking time," or the repetition of lessons already learned. Instruction which is not progressive, while it may be of some use as drill and discipline, is of little real educational value. It gives only a superficial and transitory acquirement, while at the same time it fails to interest or to stimulate the scholar.

The grants payable under the regulations are made in respect of a four years' course only.

A certain minimum number of hours in each week must be given in each year of the course to the group of subjects commonly classed as "English" and including the English language and literature, geography, and history; to languages, ancient or modern, other than the native language of the scholars, and to mathematics and to science. Ample time is left for a well-planned curriculum to add considerably to this minimum in one or more of these groups of subjects, as well as to include adequate provision for systematic physical exercises; for drawing, singing, and manual training; for the instruction of girls in the elements of housewifery, and for such other subjects as may profitably be included in the curriculum of any particular school.

In respect of this complete course of graded instruction, grants will be made on a simple and uniform scale. This grant applies alike to all the types of school which come within the general definition of a secondary school, as above given. These types fall, broadly speaking, into three main classes, whether regarded from the side of the standard or of the kind of general education which the school is meant to provide. In the former aspect they fall into one or other of the three grades of the schools inquiry commission of 1864 and the secondary education commission of 1894; the first-grade schools leading up directly to the universities and the colleges of university rank; the second-grade schools, which stop short of that point as regards the bulk of their scholars; and the third-grade schools, which do not attempt to carry education much beyond the age of 16, and the object of which is to turn out scholars adequately equipped for commerce and business, for entering upon apprenticeship to the teaching profession, or for proceeding, with a sound preliminary general training, into technical and industrial pursuits. In the latter aspect, in respect of the kind of education offered, they may roughly be discriminated into what are known in ordinary usage as the literary, the scientific, and the commercial types of school; the first of these paying special regard to the development of the higher powers of thought and expression, and that discriminating appreciation of what is best in the thought and art of the world, in other ages and countries, as well as in our own, which forms the basis of all human culture; the second to the training of the intellect toward understanding and applying the laws of the physical universe, and the third to the equipment of the scholars for practical life in the commercial and industrial community of which they are members.

The board desire it to be clearly understood that the fact of a uniform scale of grant being given to all these grades and types of school implies no belief that they are of equal importance or have indiscriminate claims to State aid. Still less does it imply the assumption that the cost of maintaining one grade or type of school is the same as that of maintaining any other with a similar number of scholars, or that the return to the State per scholar in the form of trained material for citizenship is estimable in uniform terms of so many shillings a head. The uniform scale of aid given is designed to give impartial encouragement to all well-considered local efforts toward developing a general

system of secondary schools through many channels and in varying directions. Much of the work that has to be done in establishing such a system is experimental and will have to be reconsidered later in the light of its results. The secondary schools are in a sense the educational laboratory of the nation, and the case of elementary schools shows how difficult it is, even after a generation of practical working, to reach any certain conclusion as to the relative efficacy of different subjects and methods and as to the exact point at which the control or influence of the State ceases to be an expanding and stimulating force and tends to fetter or to sterilize individual genius and local patriotism.

To this uniform scale of grants, however, one exception is at present retained as justified on historical and practical grounds and as necessary toward continuity of administration. The schools hitherto known as "Division A schools" (in these extension is given to the scientific course) form an important element in the provision for higher education, and have grown into existence by the direct encouragement and special aid of the board. A special imperial grant toward aiding the teaching of pure and applied science has for many years been one of the accepted liabilities of the State. This type of school is one which, in the words of previous regulations, "provides a thorough and progressive course in science, forming a part of a general education," and including individual manual instruction and practical laboratory work. The instruction given in it is, upon this side of its work, somewhat more advanced and somewhat more specialized than that of ordinary secondary schools, even of a higher grade, and the cost of maintenance is correspondingly enhanced by the more expensive nature of its apparatus and general organization. For this type of school a special grant is made in addition to the ordinary grant which it receives as a secondary school complying with the general conditions prescribed for all such schools. The amount of this special grant will be fixed by the board, with regard to the circumstances of each school, upon a scale which is the practical equivalent of the scale previously applicable to schools of this type, and may reach a maximum which doubles the total amount of the ordinary grant.

In addition to the general requirements certain specific conditions are laid down by the education board to which a secondary school must conform in order to share in the Government grant. The most important of these conditions are as follows:

The school must be efficient and must not compete unduly with a neighboring school; no religious test or requirement as to religious observances or attendance upon religious exercises shall be imposed upon day scholars; the curriculum and time-table of the school must be approved by the board of education; a full account of the income and expenditure of the school must be annually submitted to the board; the fees charged must be approved by that body; the school premises, equipments, and appliances must be satisfactory; the school must meet regularly during not less than thirty-six weeks in the course of the school year, and for not less than four hours each school day. It is further specified that the teaching staff must be sufficient in number and qualifications; that the salaries offered shall not be subject to variation according to the amount of grant received, and the registers must show not less than 20 qualified students in the approved course of secondary instruction.

To schools fulfilling the conditions required, grants will be paid on account of each scholar attending the approved course of secondary instruction on the following scale:

	Shillings.
(a) In the first year of the course.....	40
(b) In the second year of the course.....	60
(c) In the third year of the course.....	80
(d) In the fourth year of the course.....	100

No grant is payable for more than four years in all on account of any one scholar, and no scholar is eligible for grant who is reported by the inspector as unfit to attend the course. A scholar promoted during the school year is

regarded for the purposes of grant as a scholar of the year from which he or she was promoted.

No scholar is eligible for grant whose attendance has not been registered at 80 per cent of the meetings of the school during the year; but where a scholar has been prevented from attending through illness or risk of infection, a medical certificate to that effect may be accepted in lieu of any attendance.

In addition to the above grant a special grant will be paid on account of each scholar attending a special course under specified conditions at such rate as may be determined in the case of each school by the board. * * *

To insure adequate results from the encouragement thus given by the central government to secondary education, it was "considered necessary to commence the establishment of an inspectorate for secondary schools under a chief inspector especially responsible for this work."^a

STATISTICS OF "HIGHER" (I. E. SECONDARY, TECHNICAL AND EVENING) SCHOOLS.

The following statistics summarize the operations of the schools for higher education that were under the supervision of the board of education in 1902-3.

Inspection of secondary schools under section 3, board of education act, 1899.—The number of schools inspected under the board of education in the year ending December 31, 1903, was 135, as compared with 95 in the previous year. Of these 25 were inspected on the application of the county authorities aiding them; 23 were proprietary schools; 33 were private schools; 75 were schools for boys; 49 were schools for girls, and 11 were mixed schools, for boys and girls. Sixty-one were schools receiving grants under the regulations of the board for secondary schools, and in the case of 41 of these the inspection was required for compliance with the regulations.

Secondary schools receiving Government grants.—In 1903 there were 31,090 scholars receiving organized day courses of instruction in 226 secondary day schools, Division A (offering extended courses in science), an average of 137 scholars in each school. Of these pupils 25,047 were taking elementary courses and 6,043 advanced courses of instruction. In 1903, 2,645 scholars were examined in science and 1,191 in art subjects. The grants paid amounted to £130,470 (\$652,350), being an average payment per scholar under instruction of £4 19s (about \$25).

Up to the 31st of December (1903) 142 schools in England and 66 schools in Wales and Monmouthshire were recognized as eligible for grants under the regulations for secondary day schools, Division B. Of the schools in England 114 were endowed schools, 2 were county or municipal schools, 6 were established by stock companies, 10 were conducted by religious bodies, and 10 by bodies of local managers.

The number of pupils following approved courses of instruction in the schools of Division B during the school year 1902-3 was 10,094, and the grants paid amounted to £26,750 or an average payment of £2 13s. for each scholar under instruction.

CLASSES AND SCHOOLS OF SCIENCE AND ART AND EVENING SCHOOLS.

The classes in science and art to which grants are made under the regulations of the board include classes in day secondary schools, as reported above, day classes in schools of a somewhat more advanced character, and classes in evening schools.

^aTo this post Mr. W. C. Fletcher, M. A., till recently head master of the Liverpool Institute, was appointed in May, and shortly afterwards Mr. J. W. Headlam, M. A., Dr. R. P. Scott, and Dr. Frederick Spencer were appointed as staff inspectors to assist him. Each of these officers possesses special qualifications in the literary and linguistic side of secondary school work.

Under the new organization it is impossible to treat the classes in science and art separately from the schools of which they form an integral part, and consequently the following table, presented in the report of the board of education, repeats statistics already given under the head of secondary schools, and those which follow present further details respecting evening schools.

School year 1902-3.

Description of schools.	Number of schools.	Number of students under instruction.		Grant.
		Day.	Evening.	
Schools of art	231	20,598	33,679	£ 49,630
Evening schools	5,624	-----	657,594	285,126
Classes receiving grant for day work other than in pupil-teacher centers or schools which could now be recognized as secondary schools:				
Science	31	4,337	-----	6,665
Art	9	924	-----	293

Evening schools.—The present regulations for evening schools, as explained in the official report, apply to the class of schools formerly conducted in accordance with the regulations of the science and art department, and continuation schools regulated by the elementary school code.

The former included very advanced classes held in important technical institutions as well as some elementary classes held in smaller towns and villages. The latter were most typically represented by the village evening school, giving instruction of a somewhat elementary nature.

The following statistics show the classification of evening classes and students by courses of instruction:

Course of instruction.	Number of classes.	Number of students in respect of whom a grant was paid.
Division I. (a) General or preparatory in character; (b) more specific or more advanced	15,164	448,216
Division II. Art	1,142	54,866
Division III. Manual work in wood and metal	1,467	29,780
Division IV. Science, including instruction in the scientific principles underlying certain trades or groups of trades	5,500	174,419
Division V. Home industries	3,724	92,255

As individual students in some cases attended for instruction in more than one subject of a division, the number of individual students in each division is less than is here shown—e. g., in Division II the number of individual students in respect of whom a grant was paid was 48,536, and similarly the number of individual science students was 125,704.

No grant is paid on account of a student who does not attend a class for at least fourteen hours. Students whose attendance at any class fell short of that limit are not included in the numbers here given.

The following table gives a comparison of the number of students who attended, and at the same time indicates their age and sex :

	Number of students who have attended at any time during the school year.		Number of students upon whom grant was claimed.	
	Students.	Percentage of total.	Students.	Percentage of total.
Age of students:				
Between 12 and 15 years	147,191	22	95,153	21.6
Between 15 and 21 years	348,853	53	237,867	54.0
Over 21 years	162,050	25	107,698	24.4
Total	657,594	-----	440,718	-----
Sex of students:				
Males	403,629	61	267,236	60.6
Females	253,965	39	173,482	39.4
Total	657,594	-----	440,718	-----

The efficiency of the school is tested by inspection, with or without notice, and in subjects of science or art an additional test is afforded by the annual examinations of the board.

The evening schools which earned a grant during the year ending July 31, 1903, numbered 5,624.

ACTION OF LOCAL AUTHORITIES IN RESPECT TO "HIGHER" EDUCATION.

The foregoing survey pertains to schools of an advanced grade in England and Wales and the relations established between them and the board of education. The action of the central Government, however, in respect to education is very general. It is intended to stimulate and supplement local effort, never to supplant it; hence the most important part of the current record of education, whether elementary or higher, relates to the action of local authorities (county and municipal councils).

By reference to the conspectus of the education law of 1902 (p. 801, par. 4) it will be seen that the educational functions of the local authorities, excepting that of levying a school tax, may be delegated to education committees. Reports from several of the larger cities show that strong committees have been formed and have applied themselves earnestly to the task of ascertaining the conditions to be dealt with as a preliminary to future developments. The investigation has been particularly thorough in Sheffield and Liverpool, the educational committees of both these cities having secured the services of Mr. Michael E. Sadler ^a to aid them in this stage of their work.

As regards elementary education the situation in the cities named was well known from the reports of the former school board, and consequently the investigations authorized by the newly formed education committees related to the province of secondary and higher education as it devolves upon the local authorities under the new law. The results of Mr. Sadler's investigations are embodied in two reports,^b which set forth in an exhaustive manner the existing provision for education above the elementary stage in the cities named and sub-

^a Formerly chief of the division of special inquiries and reports, department of education; at present professor of the history and administration of education, Victoria University, Manchester.

^b City of Sheffield, Education Committee Report on Secondary and Higher Education, by Michael E. Sadler, M. A. Oxon, Hon. LL. D. Columbia. City of Liverpool Education Committee Report on Secondary Education in Liverpool, including the Training of Teachers for Public Elementary Schools. Idem.

mit recommendations as to the means of improving, extending, and equalizing this provision.

In considering these reports the purpose here is chiefly to show what they disclose relative to the provision for secondary education and the proposed increase of such provision.

In his general discussion of this subject Mr. Sadler adhered to the views embodied in the Government regulations already cited as to the age limits and types of secondary education. The three types are characterized by him in the Sheffield report as follows:

(1) That in which mathematics and physical science predominate; (2) that in which (with due provision for mathematical teaching) the linguistic discipline predominates, living languages (or one living and one ancient) being taken as the chief, though of course not the only, vehicles of instruction; and (3) that in which the linguistic discipline still forms the backbone of this course of training, but is imparted for the most part through Latin and Greek, though with some regard to one modern foreign language, as well as to other subjects, like mathematics. In the case of boys (though this is due to historical reasons rather than to the nature of the case) the three types of curricula outlined above are generally found in courses of different duration. The first-named type is usually provided in a compact four-year course, fitted in between the ages of 12 and 16. The second type usually, though not always, begins at 10 years of age, or even earlier, and extends itself to about 17. The third type, in its highest perfection, occupies an even longer period. It begins (though not necessarily or always) at 10 years of age, or even earlier, and runs on to 18 or 19. In the case of girls the forms of secondary school curricula are more flexible and variable than in the case of those provided for boys. But, nevertheless, with due regard to the need for giving girls a lighter burden of work during the critical years of their physical growth, the types of their secondary school curricula do approximate to those provided for boys. The first type, less severely but still markedly mathematical and scientific, tends to be a four-year course. The second (by far the most usual) is a longer course, beginning at 10 years of age, or earlier, and extending to 17, or later. The third (or fully classical) type is very rare in the case of girls, and indeed hardly has a separate existence, but is found here and there as a small subdivision of a larger school. It carries on its work till the girls are 18 or 19 years of age.

SECONDARY SCHOOLS OF SHEFFIELD.

From Mr. Sadler's report we learn that Sheffield, with a population of 426,686, had at the time of his investigation—

two chief secondary schools for boys, namely, the Royal Grammar School and the Wesley College. At the former nearly all the boys are day scholars; at the latter boarders form rather more than one-sixth of the whole. (Preparatory departments are attached to both institutions, and there is one other private preparatory school for boys only—that of the Misses Whitfield.)

In both the grammar school and the Wesley College linguistic discipline is the backbone of the curriculum, though at each school some science is taught through the greater part of the school (at the grammar school more than at Wesley College) and a good deal of mathematics. But the grammar school, above the middle forms, branches into two different curricula—one which is predominantly mathematical or scientific, and one which is mainly classical. At the Wesley College, in the middle school one curriculum is taken practically by all boys; in the upper school choice is made between Latin and practical chemistry and between Greek and German. It should be added that many boys are sent away from Sheffield to boarding schools at a distance.^a

^a The Schoolmaster's Year Book, 1904, gives the following particulars with respect to the two schools named above: The Royal Grammar School has accommodation for 191 boys (including 4 boarders) ages 6 to 18. The annual fee ranges from £10 10s. to £13 10s.

There are scholarship funds awarded upon competitive examination, which lessen the expense for the successful candidate.

The Wesley College has accommodation for 209 boys (including 35 boarders) ages 7 to 19. The annual fees for day pupils range from 9 to 15 guineas; for boarders, from 42 to 48 guineas.

The grammar school is an endowed school, administered, as the report explains—

under a scheme of the charity commissioners. It has a governing body, upon which the city council and other local bodies are represented. It has received a grant of £600 per annum from the city technical instruction committee. The scheme provides that religious opinions, or attendance or nonattendance at any particular form of religious worship, shall not in any way affect the qualification of any person for being a member of the governing body. There is a conscience clause. The scheme provides for not less than fifteen foundation scholarships, of which one-half must be awarded to boys who are, or for not less than three years have been, scholars in any of the public elementary schools in the school district of Sheffield. The head master is required by the provision of the scheme to be a graduate of some university in the United Kingdom or in some colony or dependency thereof, or to have such other qualification as may be fixed by any regulation of the governors, approved by the charity commissioners (responsibility transferred to the board of education). By virtue of the scheme the head master has the sole power of appointing and may at pleasure dismiss all assistant masters. He receives a fixed yearly stipend, with a capitation fee, for each boy in the school, fixed on a scale appointed by the governors.

The regulations can not be changed without the sanction of the board of education, hence the school is to a certain extent under public supervision.

The Wesley College is a proprietary institution with denominational affiliations.

The two institutions are types of the best classes of secondary schools throughout the country.

The city has also a high school for girls, conforming very closely both in the subject-matter and the duration of its course to the second type of secondary schools. This is one of the schools established by the Girls' Public Day School Company (Limited). It accommodates 238 pupils. The fees, which are the same in all the schools of the company, are as follows: Entrance fee, 1 guinea; yearly fees, pupils 7 to 10 years of age, 9 guineas; 10 to 13 years, 12 guineas; 13 and upward, 15 guineas.

In the category of secondary schools in Sheffield Mr. Sadler includes also the "pupil teachers' center," which provides for the instruction of pupil teachers engaged in elementary schools.

The aim of the "center" is to secure for its pupils admission to a training college and to enable them to reach a standard of general attainment which will qualify them to profit by a normal course. The majority of the pupils are girls. Their ages range from about 15 upward. The classes are held in the evening as well as in the daytime, in order to meet the needs of the pupils who are working as pupil teachers in the elementary schools.

All other secondary schools in the city of Sheffield are strictly private schools, conducted for the profit and at the expense of the principal.

In view of the conditions so carefully investigated, Mr. Sadler declared that the most urgent demand for Sheffield was improvement in the secondary education provided for boys.

There is need [he says] for a secondary school, which should give the highest instruction in English, in classics, in mathematics, and in foreign languages, together with instruction in science. This school should train boys intended for professional careers and also for the higher posts in business. It should prepare for the universities. It should be able to give the best possible chance to boys of high mathematical or linguistic ability. The classes should be small. It should have a long course, extending from 10 (or 12) to 17, 18, or 19. It should be on the highest plane of intellectual efficiency, thoroughly well staffed, accommodated in a good building, well equipped with a library and apparatus, and carefully organized from the point of view of school games and those other forms of school activity which develop esprit de corps, give a good tone, and teach the virtues

of corporate life. Manual training should be encouraged throughout the school. The training of the hand helps to develop the brain. Great care should be taken to make the most of the average boy, but at least equal care is necessary to avoid sacrificing the interests of the specially clever pupils. With care these two objects can be successfully combined. The average boy can be helped forward and the brilliant boy can be given the special opportunities which he needs. But in order to combine these advantages the staff must be large and thoroughly efficient.

With help [he adds], either the grammar school or the Wesley College could be raised to the level of complete efficiency described above.

Among the recommendations made by Mr. Sadler was that of the consolidation of the Royal Grammar School and the Wesley College as the best means of securing for Sheffield a secondary school of the highest type. This was suggested as a mere possibility, but the education committee have since reported that—

thanks to the unselfish and public-spirited attitude of the governors of the grammar school, as well as to the broad-minded policy pursued by the Wesleyan authorities, the committee have been enabled to frame a scheme, which has been submitted to the board of education, embracing in its scope the purchase of Wesley College and grounds, covering 5 acres, and also of the grammar-school buildings and surrounding land; the adaptation of the Wesley College buildings to modern requirements, and the establishment therein of one strong secondary school of the highest type, to be the property of the municipality, supported by public funds and under effective public control. The scheme as submitted contemplates leaving the endowment of the grammar school in the hands of the governors, to be used for the purposes of higher education. The carrying out of that portion of the scheme which relates to the purchase of Wesley College has already been tacitly approved by the board of education, but difficulties have arisen in regard to other portions of the scheme, which it is hoped may ere long be adjusted, so that the whole plan may be proceeded with. It is confidently believed that the expenditure involved will be fully justified by the extremely important and far-reaching advantages to be gained by the city.

In addition to a secondary school of the highest type, Mr. Sadler noted, further, the need of a secondary school "to feed the technical school with a steady stream of well-educated lads of 16 years of age" and of a secondary school for girls "which will feed the pupil teachers' center with a steady stream of well-educated girls of 16 years of age." These two wants he believed might be met by a single secondary school of purely modern type, situated in a central part of the city.

The general character of the school is outlined as follows:

It should be a school with low fees—1s. a week, which (allowing for holidays) would be about £2 a year. It should be very well staffed with highly competent and well-trained teachers. No class should be allowed to contain more than 30 pupils. Individual work should be encouraged. The school should be in two divisions, one for boys and one for girls, with a different curriculum in each division, though many of the teachers might do work in both divisions, and, if the head master of the school thought well, both boys and girls might work together in some of the classes. There should be a large number of scholarships tenable at this school. These scholarships should give free education and be awarded for merit. The education committee would also, I think, do well to keep in hand a fund out of which further remission of fees could be privately made in deserving cases. From this fund small maintenance allowances should also be made when such addition to the scholarships was thought expedient, in view of special difficulty experienced by any parent in keeping without such aid his child at school throughout the course. Such a school would be mainly recruited from the public elementary schools. Pupils should be drafted to it from the elementary schools at or near their twelfth birthday. Earlier transference would injure the tone and intellectual standard of the elementary schools, would be incompatible with judicious selection for scholarships, and in the case of girls would involve the inconvenience, and even danger, of sending little children to school through crowded streets, often at

some considerable distance from their homes. Later transference, on the other hand, would throw the boys and girls too late in taking up the more advanced work of the secondary-school curriculum, especially the mathematics and the foreign languages. A very sharp boy will be at the top of the elementary school by his twelfth birthday, and should then be moved forward to further opportunities than the elementary school can offer him. To have sent forward a succession of well-grounded and clever pupils to the secondary school would be a public service deserving cordial recognition, and would become an honor of which the head master or head mistress in question would be justly proud.

In discussing the course of study for the boys' department of this school, Mr. Sadler bears in mind the preparation of candidates for admission to the technical school of Sheffield. His idea as to this preparatory work is of special interest to all persons concerned with the problems of technical education.

A boy [he says] should enter the technical school at 16, and not before. He should enter the technical school with the following level of attainment:

(1) He should have had, to start with, a good English education—that is to say, he should have a good command over his mother tongue (a power in which English boys, as at present trained, are sadly and needlessly deficient) and should have gained an interest in the broad outlines of history, with a closer knowledge of the lives and deeds of some well-chosen national and other heroes, and have read and learnt by heart a good deal of first-rate English poetry and some English prose. Most of this foundation should have been laid in the primary school; but the secondary school should aim at sustaining and developing, so far as time allows, the boy's interest in history and good literature, and at practicing him in power of fit expression in his mother tongue. In this respect we have much leeway to make up. Through our clumsy methods of teaching English we waste much interest and much power.

(2) Next the boy should come to the technical school with a sound grasp of elementary mathematics. This is a matter of the highest importance. The methods of teaching mathematics should be made as practical as possible. The boys should be made to see the practical value and application of what they learn; and there should be close and friendly conference steadily sustained between the mathematical teachers at the central secondary school and at the technical school, so that the work of the former may dovetail into that of the latter, and that the same spirit of teaching may prevail in both institutions. Very great care should, I think, be taken to insure that the mathematical teaching in the Sheffield schools is, from top to bottom, first-rate of its kind. This remark applies to elementary and preparatory schools as well as to the schools of higher grade. Mathematics are the foundation of applied science. Sheffield depends, in large measure, on applied science. Good mathematical teaching all through the Sheffield schools is a necessity of the situation. It should be on the best modern lines. Much harm can be done by having mediocre mathematical teaching in the early stages of a boy's educational career, and it would be a grave error to run the risk of this mischief in Sheffield, when so much depends on mathematical ability and where (so far as one can judge from an examination of the roll of Sheffield worthies) mathematical and scientific ability are especially likely to make their appearance and to find stimulus from their environment.

(3) In the third place, when the boy enters the technical school he should, if possible, be able to read, to speak, and to write simple French with intelligence and accuracy. He will find French very helpful to him in his technical studies. In later years he is not unlikely to have to travel on business, and the power of speaking French is a valuable possession, and by no means without its bearing on business success. And, further, a boy understands his own language much more thoroughly when he has learnt another to compare with it. A well organized and really well-staffed modern secondary school can give a boy fair command over one foreign language in the course of a curriculum extending over the four years from 12 to 16. But it is indispensable that the teaching should be on modern lines; that the classes should be small (never more than thirty), and that not less than one lesson a day should be devoted to the subject. (4) What remains of the boy's curriculum at such a modern secondary school as might be established at the central school should be made up of physical science (not forgetting first-hand study of nature), drawing, some manual training (this is essential), geography, physical training, and vocal music. This, with care and with provision for religious instruction, can just be got

into 31 lessons per week. It would mean hard work for the boys, but they would be there to work, and the burden would not be unreasonably great. There should be good holidays. If really hard work is done in term times both boys and masters need them.

In Mr. Sadler's opinion the course of study for the girls' department of the secondary school should be different from that of the boys' department.

I would suggest [he says] that this course, like the boys', extend over four years. But I would strongly recommend that their burden of work be far less. It is a grievous mistake to overwork girls at this critical period of their growth. And girls often show themselves more unsparing of their strength in school studies than boys usually are. An important aim of this division should be to produce a fine type of women teachers for the Sheffield elementary schools. But, of course many of the girls would go into business, and a much larger number would devote themselves to the duties of home life. These girls should all have a thoroughly good training in English; they should have a sound training in mathematics; their foreign language, taught on modern lines but with great stress on grammatical accuracy, should be French (or, if thought well, German); and probably the best choice of scientific subjects would be botany and hygiene. Vocal music, drawing, and the arts of home life should receive special attention. In girls' education there should be a strong artistic element. They should be taught to love and admire beautiful things, beautiful characters, and beautiful literature.

The nucleus of the school, whose character is thus defined, existed already in the Central School, of Sheffield, belonging to the class of higher elementary schools. Mr. Sadler's recommendation that steps should be taken to convert this institution into a secondary school of the type indicated has been approved, and the education committee reported in March, 1904, that the work of transforming and reorganizing the school in accordance with the suggestions of Mr. Sadler would at once be begun. It should be observed that the scheme for the reorganized school includes a system of scholarships and bursaries on a scale so liberal as "to insure that no child of ability and general fitness shall be debarred from the privileges of the school for want of means."

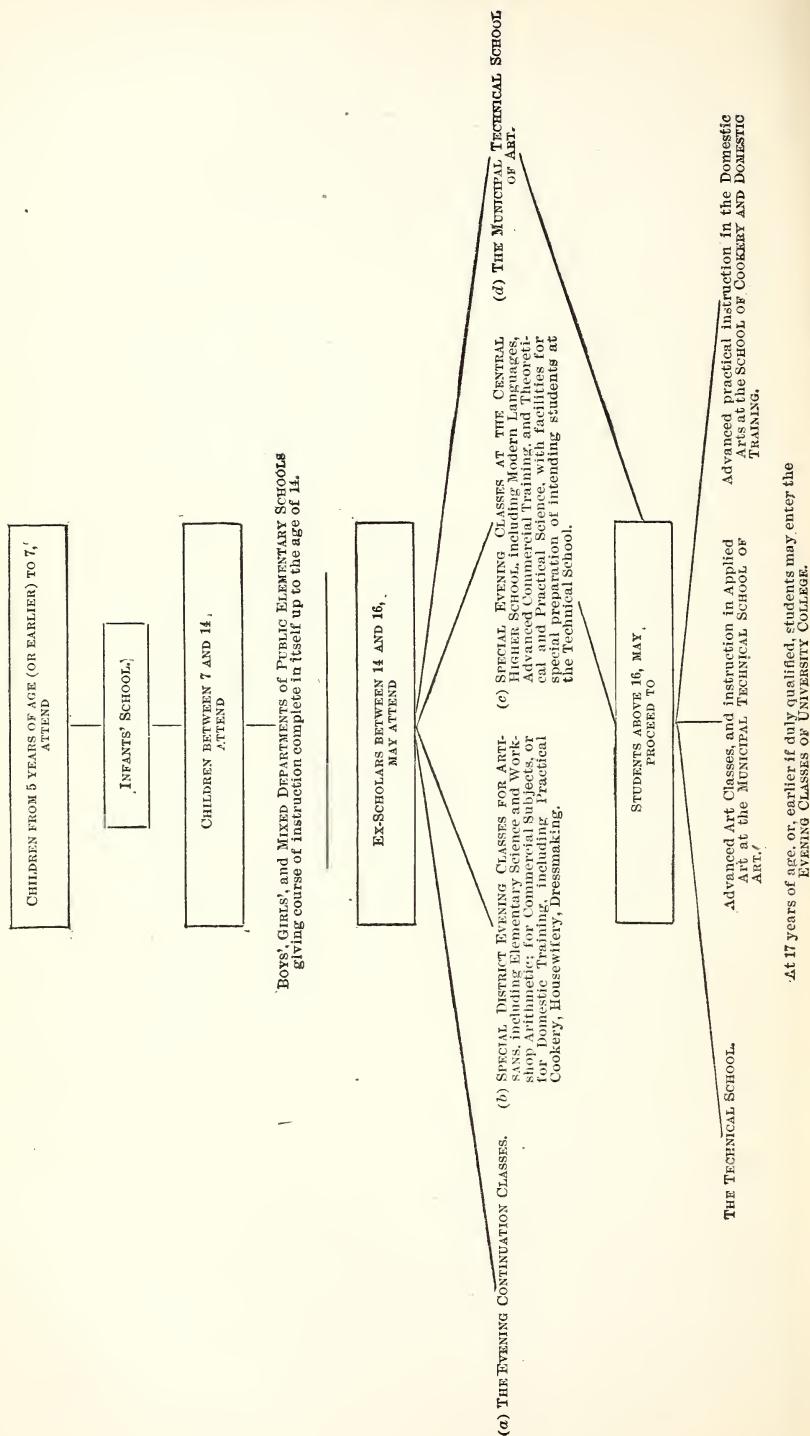
Peculiar difficulty will be encountered everywhere in England in the endeavor to transfer pupils from the public elementary to secondary schools on account of the long-standing distinctions between the two classes of schools. Heretofore pupils of the social classes reached by the secondary schools have entered at about 10 years of age, and have at once begun the study of ancient languages. Pupils transferred from the elementary schools at the age of 12 years, as proposed, will thus be at least two years behind their classmates of the secondary schools. Mr. Sadler suggests that this difficulty may be met either by providing special instruction for such pupils on their admission to the secondary school or by postponing the commencement of Latin in the secondary school till the 12th year of age. "Ultimately," he says, "I believe we shall incline to the second solution."

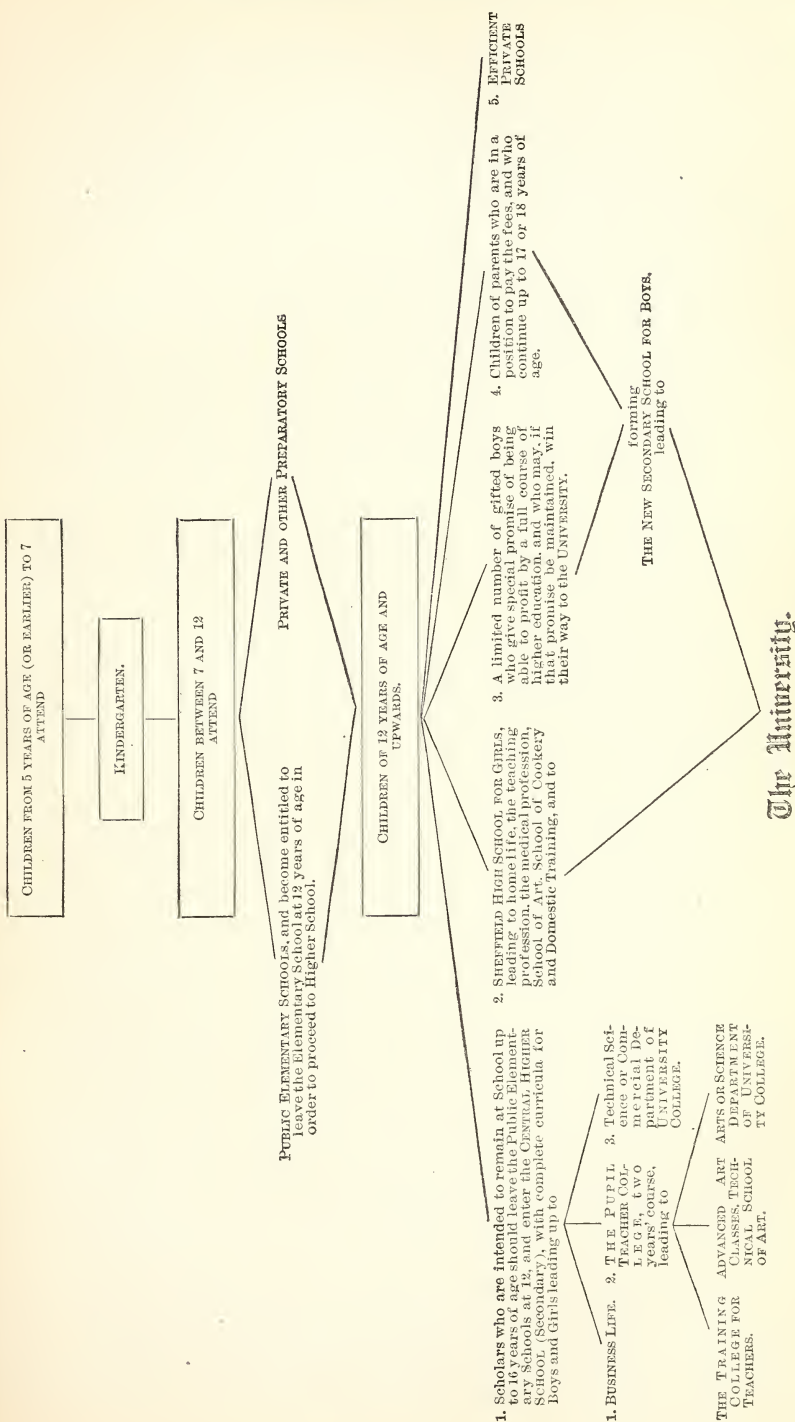
The evening schools, which are also now included in the category of secondary schools, complete the provision in Sheffield for continuing the education of the people beyond the elements.

The entire scheme of education, as provided for under the new conditions, is shown in the accompanying diagram, which presents very clearly the dual conception of secondary education that has the sanction of the ablest minds of England and the purposes to which each type of education is directed.

Secondary education in Liverpool.—The report of Mr. Sadler's investigations in Liverpool is more voluminous and of wider scope than the corresponding report for Sheffield. This was inevitable, as the task committed to him included secondary education in all its relations, and, further, the whole subject of the training of teachers for the public elementary schools. Moreover, the conditions to be dealt with in Liverpool were much more complicated than those which

OUTLINE PLAN OF PROPOSED ORGANIZATION OF EDUCATION IN SHEFFIELD.





were met in Sheffield on account of the larger population, 716,810, as against 426,686, and the mixture of people characteristic of a great commercial port. With respect to provision for secondary education there was also to be taken into account the lack of endowments. On this point Mr. Sadler observes:

Few, if any, of the great cities in England lack so signally as Liverpool the aid of large endowments for the support of secondary education. The city rose to greatness more than two generations after the impulse toward the founding, or refounding, of grammar schools, which played so great a part in the social history of England during the sixteenth and the early part of the seventeenth centuries had ebbed away. * * *

The lack of educational endowments is striking when compared with the comparative wealth in this respect of some other Lancashire towns. While Manchester and Salford between them have educational endowments amounting to £11 18s. per 1,000 of their population, and while Bury, on a like calculation, has as much as £21 4s., Liverpool has only 10s. 7d.

In discussing the general character of secondary education, the principles by which it should be governed, the different types of secondary schools, their scope and age limits, the Liverpool report repeats substantially the views expressed in the report for Sheffield. But in the case of Liverpool new interest is imparted to these views by suggested modifications to meet the demands of a commercial city.

Without repeating the author's general theory of secondary education, it is the purpose to present here extracts from this very suggestive report pertaining (1) to existing conditions; (2) to the recommendations as to future developments.

Even before the passage of the education law of 1870, says Mr. Sadler—

Liverpool made voluntary efforts, unsurpassed elsewhere in England, to grapple with the educational destitution of the masses of her people. Nor has the city failed, ever since that time, to hold a very honorable place among those communities which are bent upon progressive improvements in their primary schools and which value variety of method and of ideals in the work of elementary education.

In particular is noted, in this connection, the advance made in the development of higher departments in a large number of the public elementary schools. The statistics given show that in the school year ending July 31, 1903, "there were in the public elementary schools of Liverpool 716 scholars above standard VII; and of these 117 boys and 78 girls were in voluntary, and 258 boys and 263 girls in council schools. Forty-three of these boys and 81 of the girls were over 14 years of age." This number was, however, trifling as compared with the total enrollment in the public elementary schools of the city, viz, 132,749 (boys, 66,356; girls, 66,393). Mr. Sadler emphasizes this fact of the small proportion of pupils found in the advanced grade by comparison with New York. In this city in the year named (1903), according to the figures quoted—

Twenty-four per 1,000 of the elementary school children passed, on the completion of their elementary course, to the secondary schools, the average age of the boys being 14 years 7 months, and that of the girls 14 years 9 months. In the same year, however, in Liverpool, so far as can be ascertained, only 3 per 1,000 passed on to secondary schools, nearly all the boys being in their fourteenth year, and more than half the girls in the fourteenth or fifteenth year.

The sources from which the secondary schools of Liverpool draw their pupils are private schools and the junior departments of the secondary schools themselves; thus it appears that "the secondary school population is separate throughout its ages from the elementary school population." In order to meet the present demands, two things are necessary: (1) the correlation of the public

elementary schools and secondary schools in such a manner as will facilitate the passage of pupils from the lower to the higher schools, and thus insure the benefits of secondary education to a much larger proportion of the population; (2) an increase in the number of secondary schools.

The following table shows the existing provision of schools and departments which offer courses of instruction above the elementary stage:

Type of schools.	Number of schools.	Boys.	Percent- age of total boys.	Girls.	Percent- age of total girls.	Total of both sexes.	Percent- age of full total.
Public secondary	21	1,999	67.28	1,246	47.02	3,245	57.75
Private secondary	38	597	20.09	1,063	40.11	1,660	29.53
Higher departments of pub- lic elementary schools		375	12.62	341	12.87	716	12.74
Total		2,971		2,650		5,621	

In respect to the amount of provision that should be made in the city for secondary education, Mr. Sadler notes several conditions that make it extremely difficult to arrive at a satisfactory estimate.

Conditions [he says] vary between town and town; in no two cases are the outlying districts served by the schools of particular towns strictly comparable; in no two cases are the numbers of children sent away to boarding schools likely to be exactly the same. Moreover, in England the statistics are not yet in existence which would justify any generalization.

Mr. Sadler refers in this connection to efforts made at various times to determine the proportion of youth for whom secondary education should be provided. He considers the estimate of the schools inquiry commission (1867), that 12.28 boys over 8 years of age per thousand of the population should be in secondary schools, to be too high. The commission of 1894 abandoned the endeavor to make an estimate. Later investigations showed that in the town of Birmingham 7 boys and 5 girls per thousand of the population were receiving an education that might properly be regarded as secondary. This estimate has been accepted as a reasonable standard for the large towns generally and is used by Mr. Sadler in his analyses of the conditions in Liverpool. In this city he says:

The number of boys receiving education in secondary schools or in the higher departments of public elementary schools amounts to no more than 4.1 per thousand, and the number of girls to 3.70 per 1,000 of the population of the city. Measured by the standard suggested above, the Liverpool total is nearly 3,000 short. Where there are now 5,621 pupils there should be 8,602.

The effect of this showing is heightened by the following comparisons:

In the year 1900 the proportion of boys in the higher schools of Prussia was 5.44 per 1,000 of the total population (187,620 in 34,472,500). It will be noticed that this calculation includes the rural as well as the urban districts. It takes into account those schools only which provide a course of instruction extending up to at least 16 years of age. Measured by this standard the Liverpool total boys in secondary schools is just over 1,300 short. There are 2,596; there should be 3,899.

In Cologne, a city more than half the size of Liverpool, the number of boys attending the higher and middle schools in 1900 was 8.7 per 1,000 of the population. If this proportion were reached in Liverpool the number of boys in the secondary schools would be 6,236.

On the other hand, the New York secondary school statistics may be set over against those derived from Prussia. In the year ending July 31, 1903, New York, with a population of 3,741,231, had no more than 6,860 boys and 10,205 girls, i. e., 1.83 and 2.72 per 1,000, respectively, of the total population, in its public high schools and high school departments. Of the numbers in the private secondary schools no statistics are available. In comparing New York with

Liverpool it must be remembered that practically none of the American high school pupils are under 13 years of age. Of boys and girls over that age in all the Liverpool schools there are, respectively, 1,252 and 1,055, i. e., 1.89 and 1.47 per 1,000 of the population. There is, however, an admitted deficiency of secondary school places in New York, which, with its public secondary school population of 4.56 per 1,000, falls considerably below the present proportion for the whole of the United States. The wave of enthusiasm for high school education, which is one of the most striking features of American life at the present time, has not attained its full height in New York, though it is rising rapidly year by year. Taking the United States as a whole, 7.2 per 1,000 of the population are in public secondary schools. In some American cities the proportion per 1,000 of population is far higher. Indianapolis has 17 per 1,000; Denver, 18; Kansas City, 22; Newton (Mass.), 22; Topeka (Kans.), 24. These totals leave Liverpool far behind.

From the available report of former conditions it appears that Liverpool has suffered a decline in respect to attendance upon secondary schools. Whereas in 1864 the proportion of youth reported in schools of this grade was 3.87 per 1,000, it had fallen to 3.08 in 1891 and from that to 1.91 in 1903.

From his exhaustive survey of the whole situation Mr. Sadler declares that only one conclusion is possible, namely, that—

The proportion of boys and girls who are receiving secondary education in Liverpool schools is smaller than we should expect to find in a great commercial city. Admirable in so many other respects, the educational equipment of Liverpool is, in regard to secondary education, considerably below modern standards of accessibility and popular support.

The detailed account of the existing secondary schools and higher institutions of Liverpool make up the greater part of the report considered. Here it is impossible to do more than name with brief characterizations the institutions, due for the most part to private initiative, which have become permanent factors in the intellectual life of the city.

Under the head of secondary education are classed three schools or "groups of schools" which Mr. Sadler counts "among the most noteworthy educational institutions in Liverpool." The Liverpool Institute was established in 1825, as a public trust, "for the promotion of useful knowledge and learning." Its first teaching department was opened in 1835. The institute comprises at present the high school, with an attendance of 195 boys and accommodation for 300, and a commercial school, with an attendance of 422 boys and accommodation for 500. The fees in the high school range from £2 2s. a term to £4 4s., and in the commercial school from £1 5s. to £2 2s. The institute includes also a school for girls, established in 1844, and a flourishing art school. In 1903 the entire organization was transferred by the directors to the city, and its various departments began a new era as municipal secondary schools.

The Liverpool College, founded in 1844, comprises at present an upper school organized in a classical and a modern department, having on the registers 262 boys and accommodation for 300, fees £4 6s. 8d. to £8 6s. 8d. a term; a middle school enrolling 248 boys with accommodation for 500, fees £2 2s. to £4 a term; and a commercial school with 243 boys in attendance and accommodation for 486, fees £1 5s. to £2 2s. a term. St. Francis Xavier College, established in 1842 by the Fathers of the Society of Jesus, comprises also a classical school with 158 pupils on the rolls and a commercial school with 150 students and accommodation for 180. The fees in the classical school range from £1 2s. a term to £3; in the commercial school the fees are £1 12s. a term.

Although the three institutions named maintain preparatory departments, their work both as regards methods and purposes is essentially secondary. They are also public schools in a sense in which the term is now very generally

applied in England—that is, they comply with the conditions as to standards, equipments, etc., which entitle schools to share in Government grants.

The movement of which these institutions were the outcome may be regarded as an early local manifestation of demands which have become general in England and which no previous efforts have adequately met, even in the most progressive communities.

The causes of this early movement in Liverpool are thus explained by Mr. Sadler:

In the first thirty-five years of the nineteenth century the population of Liverpool nearly trebled itself. The town had become the great port of industrial England. Its business increased by leaps and bounds. Many of its citizens realized that the vast growth of commerce under modern conditions carried with it the need of providing, on a larger scale than hitherto, what we now call secondary education for boys, as a haven for good in a great trading center, as a means of furnishing competent recruits and cadets for business life, and (though this was less clearly understood then than now) as giving the best intellectual basis for further economic advance.

Starting thus with well-defined purposes the three institutions which arose one after the other in the period between 1825 and 1842 have given "a characteristic quality and tone to secondary education in Liverpool."

The remaining schools of Liverpool which are classed as secondary are private schools whose work is largely confined to the training of younger children.

The two schools for girls belonging to the Girls' Public Day School Company are, however, essentially secondary in character and maintain excellent standards. Particular mention is also made in the report of the work of the great religious communities in the training of girls which forms "a striking feature of the educational life of Liverpool."

Provision for the training of teachers for the Liverpool elementary schools, which was included in the scope of Mr. Sadler's investigation, comprises five centers for the instruction of pupil teachers and three training colleges.

The "centers" are organized to continue the education of young people who are engaged part of each day in teaching and may be regarded as specialized secondary schools.

The training colleges like our own normal schools offer academic and professional courses of study. Two of these colleges are residential, and the third is a day college connected with the University of Liverpool. It is noticeable also that a large proportion of the students from the principal Pupil Teachers' Center enter the university.

The importance of increasing the relations between the university and the professional training of teachers was one reason for making the investigation all inclusive; additional reasons were found in the existence of specialized schools of art and technics, which depend for their full development upon students whose preliminary education has been prolonged, at least through the secondary schools. The specialized schools enumerated by Mr. Sadler are the Municipal School of Art, formerly a part of the Liverpool Institute, the City of Liverpool School of Architecture and Applied Art, established in 1894 by the joint action of the technical instruction committee of the city council and the university authorities, the School of Commerce, controlled by a joint committee of the representatives of the Liverpool Chamber of Commerce, of the university, and of the education committee of the city council, the Training School of Cookery, and technical colleges of domestic science.

These specialized schools, as well as the Liverpool University, maintain evening classes which, with the evening classes conducted in the elementary school buildings, represent a very important part of the educational provision of the

city. Taken together these classes form, "in intention, at least," says Mr. Sadler, "an admirably graded system of schools." Their work is classified by him under five headings, as follows:

1. Nonspecialized instruction, largely literary.
2. Commercial subjects.
3. Mathematics and science.
4. Manual training.
5. Technological subjects, with a subdivision for domestic arts.

These headings are of interest rather as suggesting the lines of future development than as defining present distinctions. They illustrate also the tendency to recognize diversified purposes in secondary education and to provide for corresponding types of institutions, which is manifest throughout the report.

The conception of secondary education in its relation to business life set forth in the Liverpool report may be gathered from the following citations:

With regard to secondary education for boys [says Mr. Sadler], the point which in the special circumstances of Liverpool transcends all others in importance is the need for insisting on first-rate quality in the instruction and training to be provided. My inquiry has convinced me that a multiplication of facilities for getting a rather showy secondary education of poor intellectual quality would do very little good to Liverpool, and in the long run would not give a sufficient return for the money which would have to be spent upon it. On the other hand, I am persuaded that the future commercial greatness of the city, its command over new sources of prosperity, its power to hold its own against keen rivalry in the markets of the world, and the continued vigor of its civic life, depend, to a critical degree, on steps being taken at once to raise to a high level the intellectual standard of the secondary schools, which prepare the greater number of the boys of the city for responsible business careers. A comparatively limited supply of thoroughly good secondary education, if made really accessible to gifted boys in all ranks of the community, would render far greater service to Liverpool than the provision of a much larger amount of teaching which lacked scholarly thoroughness and failed to furnish searching intellectual discipline. Quality rather than quantity is the wise aim in the reorganization of secondary schools. The necessarily great expense of providing a really good secondary education points in the direction of concentrating effort upon a limited number of schools with a view to the firm establishment of a high intellectual standard in their work.

In his suggestions as to the remodeling of the Liverpool Institute Mr. Sadler dwells with even more emphasis upon the importance of quality.

The recent transference of the institute to the city council affords [he observes] a suitable opportunity for remodeling the organization of the school. At present the institute consists of two schools of different grades under one head master—the high school, with 195 boys, and the commercial school, with 422 boys. In neither school do the boys stay long enough to get, in the mass, the thorough intellectual training which is the proper work of a secondary school and which gives the best foundation for mastery and sustained purpose in the serious work of life. It seems undesirable that this state of things should be allowed to continue. I would suggest, therefore, that instead of the two schools at the institute there should in future be only one and that the one school should be so equipped as to do first-rate work throughout a well-planned course extending over at least four years, viz. from 12 to 16. This unification of the two schools would mean the closing of the commercial school, the boys who are at present receiving instruction there being allowed to finish their course, but no further entries being sanctioned. Steps would have to be taken to make parents realize that in future a course of training at the institute would mean four years, and that a boy would be expected to enter not later than his twelfth birthday and to stay until 16. Boys would of course be allowed to enter younger and to stay later, but the minimum ordinary course should be between the ages named above. A high standard of work should be insisted upon. No boy should be admitted above the age of 12 unless able at once to take his place in the class normally reached by those boys of his age already in the school. I would also suggest that the education committee should make a strong appeal to

the chief employers and business houses in the city to cooperate with them in this matter by causing it to be publicly known that in their future appointments they would be prepared to give preference to boys who have completed a course of secondary education extending to the sixteenth year. The head master of the school would then be able to depend upon having a steady stream of boys passing through a graded course of instruction lasting for at least four years. He would thus be in a position so to organize the curriculum and so to plan both the methods of teaching and the order of subjects as to secure the best possible use being made of the time during which the boys remained at school.

With respect to the course of study for this reorganized school the report is specific.

It should be carefully adapted to the special needs of Liverpool. This would make it desirable to base the main curriculum upon the Humanities and to assign an important place in it to the study of the mother tongue, in order to give thorough training in the art of expression. Adequate time should be given throughout the school to the study of history and of literature. Geography, taught upon the best modern methods, should be a strong feature of the curriculum. Great care should be taken to secure for every boy in the school a sound and intelligent training in mathematics. A course of general elementary science should form a part of the curriculum with a view to the formation of a habit of intelligent and accurate observation, and also in order to make each boy quick to realize the bearings of scientific discovery upon all forms of modern enterprise and upon questions of social organization. The two languages other than English which would be of most value for the purposes of the school training would be French and Latin. Each should be taught in such a way as to interest the boys in the history, literature, and national life of the peoples concerned. There is a strong reason for giving both Latin and French a place in the curriculum of the school. It is desirable that in the course of their secondary education boys should gain some insight as well into the meaning of a great ancient civilization as into the history and ideas of a great modern people whose thoughts and deeds have had strong influence upon our own. French would be begun before Latin. A considerable number of hours each week should be given to the study of it when it is first begun in order that the boys may make real progress with the language and get a feeling of power in their use of it. It should be taught according to the best modern methods, and with due regard both to skill in speaking and reading it, and to grammatical accuracy in composition. It would be well, I think, to arrange for the teaching of Latin in the school to begin at 12 years of age. This plan has been tried with good results elsewhere. It gives more time in the earlier years of education for training in the mother tongue and for the study of French. It has the further advantage of making it possible for boys entering the school from the public elementary schools at 12 years of age to begin Latin along with the rest of their school fellows. But the plan involves giving much time to the subject at its commencement in order that the boys may make rapid progress and quickly get on to the point of being able to read selections from great Latin writers. And with this object some of the best Latin teaching in the school should be concentrated on the beginners' class.

All the boys should learn drawing. Manual instruction should (at any rate for a portion of the school course) form part of the regular curriculum, and every boy should go through a carefully graded course of physical exercises.

Such a curriculum would, I believe, best meet the needs of the greater number of boys in a secondary school in Liverpool. But it would also be desirable to offer an alternative course based more largely on physical science and requiring only one language, and that a modern one, besides English. And apart from this a third course of study might well be offered by allowing, as a variant of the main curriculum, a second modern language to be taken instead of Latin. Such a system of "electives," if confined within reasonable limits, would not dislocate the organization of the school, provided that the staff of teachers were sufficient to cope with the increased number of classes.

The size of the classes should be kept small. In no class should the number of boys exceed 30. In many subjects 25 is the maximum limit compatible with really good work and with attention to the different needs of the individual boys. In the higher forms of the school the number of boys under the care of each master at any one time would be in many cases considerably smaller, because those boys who stayed beyond their sixteenth year would often be doing more specialized work.

For the successful working of the institution whose scope is thus defined—

It would be necessary [says Mr. Sadler] to strengthen the present staff of masters, and to make a position on the staff of the institute one which would attract men of first-class ability into the service of the school. A good deal was done toward this end by the directors of the institute during Mr. Fletcher's head mastership, but the intellectual vitality and educational power of the school need to be further strengthened. The real efficiency and influence of a school depend upon the talent, the energy, the experienced skill, and the character of its teachers, and therefore no part of the expenditure is more remunerative than that devoted to the maintenance of a very highly qualified staff of masters. This is a matter upon which at the present time great emphasis should be laid, as the inadequacy of the salaries generally given to secondary schoolmasters in England is deterring men of capacity from entering the profession. It would be a national misfortune if at a time when we need an intellectual quickening in our secondary schools there were to be a failure in the supply of the very men who alone can give us what we require. That supply, it is true, is not wholly governed by the rates of salary offered. Many a teacher keeps on under conditions of pecuniary discouragement because he loves his work, because he is fond of boys, and because he desires to serve his generation. But a national system of education, though its greatness is enhanced by zeal and self-devotion, can not subsist on self-sacrifice alone. The economic basis of the teaching profession must be sound if it is to be continuously recruited by men who can uphold its standards and worthily accomplish its work. Now, when we consider the cost of educating a secondary schoolmaster for his profession, and the responsible duties which he is called upon to perform, we shall not deem a salary commencing at £150 per annum, with annual increments of £10 up to £300, an unreasonable minimum for a fully qualified graduate master in a secondary school. A man is soured and is apt to lose his love for his profession when year after year his salary remains far below that which he could have certainly earned in another and not more arduous calling. Nor does the matter affect himself alone. Discouragement and dissatisfaction in the minds of the teachers have a depressing and hurtful influence upon the vital tone of the school. It is desirable that in a large secondary school of good standing there should be two schemes of salaries—one recognizing the normal need, starting from a fair minimum and rising by periodic (preferably annual) increments to a reasonable maximum which would allow of the maintenance of a family: the other, on a higher scale, applicable to cases of special excellence and ability and brought into operation by the governors on the head master's recommendation when it was thought expedient to secure or to retain the services of a teacher with specially high qualifications for the work of the school.

In this connection, mention should be made of the desirability of giving teachers (and the remark applies as well to women as to men) occasional leave of absence for a term in order that they may see other schools at work and so keep themselves in touch with the advance of educational practice in other parts of the country or in other lands. A teacher is always in danger of getting into a rut. He is apt to fall into routine. His work absorbs him, and rather cuts him off from opportunities of seeing how other teachers, especially those younger than himself, are handling the difficulties with which he and they alike have to contend. A school gains greatly by anything which keeps its teaching staff fresh in mind and interested in improvements in methods of teaching and of school organization. A "grace term," after five years of service in the school, and a somewhat longer leave of absence after ten years of such service, would enable a teacher to widen the range of his professional experience, or to carry out some piece of original research, with great benefit alike to himself and to the school. An arrangement of this kind has been found advantageous in one of the great public schools in England. It is common in America, and it well deserves consideration whether a similar plan would not prove of benefit to the secondary schools of Liverpool.

It is of special interest also to notice that Mr. Sadler has no thought of maintaining this institution on a cheap basis. He warns against—

the attempt to provide secondary education at a cost incompatible with real intellectual efficiency. Yet intellectual efficiency, combined with high personal character, is of vital importance in a system of secondary schools. With-

out it they must fail in the very work which they are set to do, and the labor and expense of establishing them would be practically thrown away.

A secondary school for boys [he continues] capable of rendering to Liverpool the kind of service which may fairly be expected from the institute, would be found to cost, in the end (apart from interest on capital charges and from the cost of buildings), about £23 a year per boy in the school. The cost at first would be considerably less, but would rise, with the increments to salaries needed to retain the services of first-rate teachers in full efficiency, to the limit named above. I am aware that this estimate is higher than those usually made, but careful inquiry and calculation have convinced me that the current estimates fall considerably short of the real cost which must be incurred in important city schools if intellectual efficiency is to be secured and maintained.

The following table confirms the view which I have taken of the real cost of good secondary education for boys. It should be noted, however, that the net cost here given includes certain charges for administration and the expenses of scholarships. (At Norwich scholarships are not included.)

Year.	School.	Average number of boys.	Net expenditure for year.			Average cost per head.		
			£	s.	d.	£	s.	d.
1903	Norwich Grammar School	116	2,376	5	7	20	9	8
1903	Nottingham High School	329	7,580	3	10	23	0	9
1902-3	Bristol Grammar School	179	4,447	14	1	24	16	11
1903	St. Paul's School	581	24,279	4	6	41	15	9

The question of the fee to be charged in such a school as that described above next calls for consideration. At present, at the institute, the fees for boys over 11 in the high school amount to 12 guineas a year, and in the commercial school to 6 guineas. The closing of the commercial school would result in large numbers of boys who would otherwise have been sent to that school being placed (greatly to their advantage) in the high school instead. But in view of the additional expense which this would entail upon their parents, it might be thought desirable to strike an average between the present high school and commercial school fees and to charge a fee of 9 guineas a year for the new school. It would be well to have "no extras." except, of course, for private lessons in music or other subjects. Boys entering the school between their tenth and eleventh birthday and intending to remain till their sixteenth might be charged, for the whole of their stay in the school, a reduced fee of 8 guineas a year. This would encourage parents to send their boys for a longer school course. For boys under 10, a junior department would be desirable. The annual school fee in the junior department might be fixed at 6 guineas.

The fees recommended, it will be seen, are not large, but they indicate a policy in respect to secondary education quite unlike that which prevails in our own country. Here the desire is to induce the largest possible number of young people to continue their studies beyond the elementary stage. This is held to be a measure of public safety, a means of raising the level of general intelligence, and of increasing the mental alertness of individuals. These results are also seen to promote industrial aptitudes and power, hence the almost phenomenal increase in the number of our free high schools in recent years. English policy, on the contrary, is directed to the selection of young people of special promise and to their preparation for definite spheres of usefulness. This purpose is manifest throughout Mr. Sadler's reports. He goes, however, beyond many of his countrymen in the recognition of the fact that ability has no social limits, but may be found even among the poorest classes, and he is particular to recommend, both in the Sheffield and the Liverpool reports, an increase of scholarship funds to be awarded by competitive examination, thus enabling promising young people, irrespective of their social class, to continue their studies in secondary schools. The extended discussion of this policy emphasizes anew the difference between the American and the English conception of secondary education.

It is interesting to note that Mr. Sadler recognizes the need for a manual training school in Liverpool adapted to a class of pupils differing in many respects from those who would naturally enter the typical schools described. The manual training schools, he says, should take boys "at about 13 years of age and keep them in training up to 15 or 16, the latter being the age at which boys may be taken as apprentices in the engineering trades." The scope and course of study suggested for this school are as follows:

It would not be the aim of such a school actually to teach a trade or to serve as a substitute for apprenticeship. Its purpose would be to fit the boys to learn their trade more quickly when the time came by giving them a well-graded preparatory course in practical handwork, combined with a scientific study of the fundamental principles underlying the occupations by which the pupils intended afterwards to earn their living. Mathematics, drawing, and natural science would thus, along with manual training, form an important part of the curriculum. But the school course should also give ample time for the teaching of English (including composition, national history, and literature) in order to kindle the imagination of the boys, to give them an ideal of citizenship, to cultivate in them a love for some masterpieces of the national literature, and to train their power of expressing themselves in good, clear English. It would be a great mistake to narrow down the course of study at a manual training school to shop work and science. The humanities are needed in it as well. Special care should also be given to physical training. The aim of the school would be to turn out a number of keen young fellows, vigorous in body, alert in mind, proud of their country, clever with their hands, with a good hold on mathematics, with some knowledge of scientific method, and fitted to do credit to themselves and to Liverpool in the engineering trades, or in other industries which their skill and trained practical ability might in time do much to promote in the city.

Entrance to the school should be confined to those whose work in the elementary school had proved their fitness to profit by the more advanced work of the manual training school. The course should be so arranged as to allow those boys who wished to stay three years to pass through a graded training extending over that time. Many of the boys, however, would probably leave at the end of the second year. If the week's school work were to amount to thirty hours, the division of time between the various subjects might be somewhat as follows:

	Hours weekly.
English (including written and oral composition, national history, literature, and, for part of the course, geography)-----	6
Mathematics-----	5
Natural science (physics and chemistry, magnetism and electricity, and a general course in theoretical and applied mechanics)-----	6
Manual training and drawing-----	10
Physical training-----	3
	<hr/> 30

The manual training or workshop course would be correlated with the course in drawing (which should not ignore the artistic side) and with some parts of the instruction in natural science. It might begin, in the first year, with a course in carpentry and joinery, combined with a course in mechanical and free-hand drawing. The next year's course, continuing the mechanical and free-hand drawing, might include wood turning as preparatory to pattern making work, and the first part of a course in forging and blacksmithing. The latter might be continued in the third year, and be followed by a course in iron-fitting and elementary machine-tool work.

A manual training school of this kind should really be a school with a corporate life of its own, and not merely an aggregate of separate classes. A plain building of simple construction would be the most appropriate for its work, but it would be desirable that the rooms for class work should be well furnished and decorated with good taste.

The difficulty of obtaining suitable teachers for this school is admitted. The danger in this respect, says Mr. Sadler—

would be lest the school should fall either into the hands of men who were good at shop work, but had no experience of teaching boys and of organizing school

life, or into the hands of men who knew about school management, but were deficient in their practical knowledge of shop work. What is wanted is a combination of the two kinds of experience.

The suggestion is made that if the education committee venture upon the experiment of establishing the school—

they should seek some thoroughly qualified, practical man with a strong interest in and experience of teaching, and after nominating him as head master, to send him to the United States to make a careful study of what is now being done there in the manual training schools. On his return he should be asked to submit a draft plan of work for the school, and inquiry might then be made for suitable members of the teaching staff, the importance of having good English teaching in the school being steadily borne in mind from the first.

Additional recommendations in the report advise means for encouraging and improving private schools which at present provide for about one-third the pupils receiving secondary education in Liverpool, and for strengthening of the upper classes of public elementary schools. If these are adopted the various agencies for "higher" education in Liverpool will be brought within a unified system.

The report is enriched by several appendixes, of which the most important is a "Memorandum by Mr. Cloudesley Brereton on 'Suggested improvements in the teaching of modern languages in Liverpool.'" This appendix formulates the conditions for attaining exact and valuable results in the teaching of modern languages, a subject of ever-growing interest to all communities.

Secondary education in London.—The two reports above considered present for the cities to which they relate a more complete statement of the provision for secondary education than is at present available for any other city of England with the exception of London. While in the metropolis no single investigation covering the whole field of education has recently been attempted, the results of several independent investigations made during the past decade enable one to form a pretty clear idea of the provision the city offers for the education of its citizens. From an investigation made in 1892 by Mr. H. Llewellyn Smith, secretary of the National Association for the Promotion of Technical and Secondary Education,^a it appears that at that date there were in London 36 endowed secondary schools, attended by 12,500 boys, and 10 proprietary or stock company schools, attended by 1,800 boys. The endowed schools are subject to a form of public control through the right of Government to insure that the conditions of the trusts are fulfilled. The proprietary schools also have a semipublic character, being conducted under the auspices of incorporated companies.

In addition to the classes of schools named, there were denominational schools and schools for special classes, such as the sons of missionaries, the sons of poor clergymen, and the like, and above 450 private schools for boys and girls.

According to the results of an investigation published the same year as the above (1892)^b there were for girls 20 high schools, of which 2 were endowed and the remainder proprietary, having accommodations for 4,950 pupils, and 14 middle-class schools, with an attendance of 3,866 pupils.

It is interesting to compare the statistics of enrollment in the secondary schools of London given above with the estimates presented eleven years later by Mr. Sidney Webb, chairman of the technical education board of London. In his work on London education, published in 1903, Mr. Webb says:

There is a common impression that the public secondary schools of London are few and inefficient. Yet, including only foundations of which the manage-

^a See *Studies in Secondary Education*, edited by Arthur D. Acland, M. P., pp. 145–199.

^b See *Studies in Secondary Education*, chapter on "Secondary education in London (girls)." Clara E. Collet.

ment is essentially public in character. London has to-day certainly not less than 25,000 boys and girls between 7 and 19 in its secondary schools, actually a larger number than either Paris or Berlin.

The schools referred to numbered 85 and evidently included the 80 schools (46 for boys, 34 for girls) which in 1892 were estimated to have a total attendance of 23,116 pupils (14,300 boys, 8,816 girls).

In addition to the 85 schools having a semipublic character, Mr. Webb notes that—

In the background and not included in this calculation stand, in varying quality, the private "commercial academies" and "colleges for young ladies" of the genteel suburbs. To these is left the opportunity of justifying their existence by catering for special needs and supplying a desirable elasticity to the necessary rigidity of any public system.

No particulars are given with respect to these strictly private schools, but they are certainly not fewer than in 1892, when they were said to number at least 450.

As in the case of Liverpool and Sheffield, fees are charged in all the secondary schools of London, and the only chance for a poor boy to enjoy their advantages is by securing a scholarship. There is, however, quite liberal provision of funds for this purpose.

Every year [says Mr. Webb] about 800 of the ablest boys and girls in the public elementary or lower secondary schools, between 11 and 13 years of age, are picked by competitive examination for two to five years' higher education. These 2,000 scholarships provide for the cleverest children of the London wage-earners a more genuinely accessible ladder than is open to the corresponding class in any American, French, or German city. In addition to these maintenance scholarships there are free places at most of the London secondary schools, from St. Paul's downward, which are utilized, as is found to be the case with all provision of merely gratuitous secondary education, by the "lower middle" and professional classes. Above these opportunities stand the intermediate and senior county scholarships, and others provided by various trust funds, probably about 600 in all, for candidates between 15 and 19 years of age. These serve partly to carry on the best of the junior scholars, partly to admit to the superior secondary schools the ablest children of parents ineligible for the lowest rung of the ladder, and partly to take the very pick of London's young people to the technical college and the university.

As Mr. Sadler has done in the case of the cities upon which he has reported, so Mr. Webb, having in view the new conditions and increasing demands, recognizes the need of revising and extending the scholarship system of London. Upon this subject he says there is a consensus of opinion that—

When a child passes from an elementary to a secondary school, it should do so before the age of 12, and should remain for not less than four years. It looks as if the limit of age for the normal junior scholarship should be reduced from 13 to 12, and its duration extended from two to four years, whilst the annual maintenance allowance up to the age of 14 might be reduced to £5, rising to £10 and £15 in the last two years.

In view also of the scarcity of teachers—"the teacher famine," as it is called—and the consequent need of increased provision for the education of pupil-teachers, Mr. Webb observes:

If the need for pupil-teachers causes the number of scholarships to rise to 2,000 a year, it would perhaps be possible to effect the further desirable reform of beginning the selecting process by a preliminary examination conducted by the head teachers themselves, in their own schools, of all the children who had attained the fifth standard before the age of 12; and of undertaking to award the scholarships, not to any fixed number of winners, but to all who, in the subsequent centralized competitive examination, reached a certain percentage of marks. Such a reform would organically connect the scholarship system with all the public elementary schools instead of, as at present, only about a third of them, and would bring London's capacity-catching machine to bear on every promising child.

In the discussion of this subject it is evident that Mr. Webb has in mind the view of secondary education long established in England. "The secondary schools * * * charging high fees," he says, "and providing an education of high grade may be left to themselves." Naturally schools of this character are patronized only by those who are able to afford the expense, although by means of scholarship funds a few phenomenally gifted youths of the poorer class come also within the circle of their influence. The great bulk of public aid, whether in the form of grants or scholarships, goes, however, to the secondary schools of the second and third types that have been already discussed. But under the most liberal provision at present contemplated the masses are not reached by any of the secondary schools. For them evening classes are maintained which can be accommodated to the wants and conditions of those who have already entered the ranks of workers. The development of such classes is one of the most important of the many remarkable achievements of the recent London school board, supplemented since 1892 by the efforts of the technical education board of the county council. This provision is summed up by Mr. Webb as follows:

For the secondary education of the masses there has been organized, by the school board on the one hand and the London county council on the other, an extensive assortment of evening classes, providing instruction in every imaginable subject of literature, science, art, and technology. The classes of the school board, which enroll over 130,000 students for the winter session and have an average attendance of half that number, are conducted in 400 of its day school buildings, mainly by the younger and more energetic of its staff of day teachers. The work of the technical education board, dealing usually with a more advanced stage and older scholars, is concentrated in the 50 polytechnics, art schools, and technical institutes under its management or control, which have in the aggregate about 50,000 students. Here the lecturers and teachers are specialists in their respective subjects, teaching in institutions especially equipped for their work. At six of the polytechnics the highest classes have been included in the faculties of the reorganized London University, and duly matriculated evening students obtain first-class university instruction in their own neighborhood, and are enrolled as internal students of the university itself. These two schemes of evening instruction have now to be coordinated, differentiated, and developed.^a

The limitations of the evening school provision are suggested in the estimate given by Mr. Webb of the number of young people who escape its beneficent influence.

It ought not [he says] to be too much to ask that every boy or girl who leaves school at 14 or 15 should, up to 21, be at any rate enrolled at some evening class institution, even if attendance is confined to an hour a week. Yet there are in London over 600,000 young people between 14 and 21 and not a third of these are at present members of any sort of institution, recreational or educational. Out of 84,000 boys and girls between 15 and 16, only 21,000 are on the rolls. What is happening to the others? We can not as yet compel them to come in, as the Bishop of Hereford proposes, though this is done in various parts of Germany and Switzerland. But we might try the experiment of using the school-attendance officers to look after those who have not joined an evening school, using the method of persuasion just as they look after the younger defaulters from the day school.

Reference should also be made in this connection to the 7 high grade schools and the 75 higher grade departments which were developed under the former school board. Lord Reay, in his valedictory address, distinctly stated that "the character of these schools is undoubtedly elementary, not secondary;" but it is certain that the pupils enrolled in them are pursuing one or more secondary branches. The total number can not be estimated on account of the method of

^a Chapter III of Mr. Webb's book is devoted to a consideration of commercial education as it is developed in the schools of London. The organization and scope of the London polytechnics are described in detail in Chapter IV.

their classification, but it is fair to assume that the pupils over 14 years of age in grades above the seventh have reached the secondary stage. These pupils in 1904 numbered 5,299.

The information here presented with respect to provision for education above the elementary grade in three great cities of England shows the variety and the peculiarly independent character of the agencies engaged in this work, and further the difficulty of arriving at any fair estimate of the actual amount of such provision in the country as a whole. This it is evident can only be done by special investigations similar to those that have been here reviewed. For convenience of reference, the following statistics show the kind and amount of instruction given in the London board schools under the head of optional branches:

Subjects and number of students, 1903.

Algebra	30,382	Mathematics	27
Animal physiology	11,599	Hygiene	3,174
Bookkeeping	2,451	Latin	313
Botany	9,532	Mechanics	17,370
Chemistry	7,510	Mensuration	3,807
Domestic economy	896	Magnetism and electricity	1,960
Domestic science	3,064	Physics	7,498
Elementary physics and chemistry ..	11,352	Physiography	290
Elementary science	11,953	Sounds, light, and heat	117
Euclid	3,997	Shorthand	5,483
Experimental and practical science ..	4,105	First aid, ambulance, home nursing	200
French	47,868		
German	863	Total	185,811

The total, it will be seen, includes many duplications.

The statutes pertaining to the secondary and higher grade elementary schools in the three cities referred to are brought together in the following table, which includes also population and enrollment in elementary schools:

City.	Population, census 1901.	Date.	Enrollment in public elementary schools.	Enrollment in higher grade elementary schools included in the foregoing column.	Enrollment in secondary schools endowed and proprietary.
Sheffield	426,686	1904	75,750	945	^a 538
Liverpool	716,810	1903	132,749	716	^b 3,245
London	4,536,541	1904	762,974	5,299	25,000

^a As indicated in Schoolmaster's Year Book, 1904.

^b Also 1,660 in private secondary schools.

The statistics tabulated above present a very incomplete view of the actual number of young people pursuing secondary studies in the three cities included, as private schools are omitted, but on the other hand the table indicates quite clearly the extent to which secondary education has come to some degree at least under public management.^a

^a Evening schools classed now as secondary have not been included in the table, partly because statistics with reference to them are not complete and partly because they differ from day schools in respect to methods, curricula, and standards. The available statistics with respect to the registration in evening schools in the cities here considered are as follows:

City.	Year.	Enrollment.
Sheffield	1904	6,782
Liverpool	1903	13,500
London	1904	180,000

The reports by Mr. Sadler and the work of Mr. Webb on London education give a very clear insight into the educational policies and conditions of the cities to which they relate, but the statistics drawn from these sources are chiefly valuable as illustrating a movement which has assumed national scope.

Independence and variety characterize English secondary schools, and in the judgment of the experts whose works have been cited are qualities that should be jealously guarded. Nevertheless the need of bringing this great department of education into closer harmony with elementary schools and with higher institutions and of reenforcing it by public funds and public supervision is urgent. The statistics tabulated may be taken both as a measure of what is already accomplished in this direction in the three cities specified and as a standard by which to measure further progress.

PRINCIPAL EVENTS IN THE MOVEMENT FOR ORGANIZING SECONDARY EDUCATION IN ENGLAND.

- 1835. Appointment of select committee to inquire into means of extending a knowledge of the arts and of the principles of design among the artisan classes.
- 1836. Grant of £1,500 for the establishment of a normal school of design.
- 1837. Normal school of design opened.
- 1852. Department of practical art constituted.
- 1853. Science department added to the department of art. Reorganized department empowered to maintain special schools of art and science, to draw up examination schemes and conduct examinations of schools and classes complying with specified conditions, and to distribute Government grant to the same.
- 1853. Charity commission appointed to inquire into the condition and management of charities and to frame schemes for their administration; educational endowments thus brought under supervision.
- 1856. Control of the department of science and art transferred to the committee of council on education.
- 1861. Lord Clarendon's commission to inquire into the nine leading public schools (secondary).
- 1864. Lord Taunton's commission to inquire into the condition of additional secondary schools (endowed grammar, proprietary, etc.). Report of commission published in 1868.
- 1865. Endowed schools law passed.
- 1894. Commission appointed (Bryce's) to consider "What are the best methods for establishing a well-organized system of secondary education in England, taking into account existing deficiencies and having regard to such local sources of revenue from endowment or otherwise as are available or may be made available for this purpose?"
- 1895. Report of commission published.
- 1902. Education law passed authorizing local authorities to raise funds for and exercise a measure of control over secondary education.



CHAPTER XIV.

EDUCATION AT THE ST. LOUIS EXPOSITION.

A SERIES OF MONOGRAPHS COMPILED AND EDITED BY

GEORGE E. GAY,

President of the Educational Exhibitors' Association of the Louisiana Purchase Exposition.

I.—PUBLIC SCHOOLS OF THE UNITED STATES.^a

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^a Chapter XV treats of polytechnical and art schools and certain other institutions at the St. Louis exposition. Universities and colleges in the United States and the educational systems of foreign countries are treated of in other chapters in Volume II of this Report.

INTRODUCTION.

The Educational Exhibitors' Association of the Louisiana Purchase Exposition was composed of the directors of the educational exhibits in the Palace of Education and was established to promote social intercourse among its membership, to advance the interests of the several exhibits, and to promote the cause of popular education in all possible ways. The organization was successful in all departments of its work and added much to the pleasure of exhibitors and the benefits received by them.

It was early proposed by the association to publish a volume describing the educational exhibits and giving the lessons to be derived from them. The nature and form of this volume were discussed for a long time, and various propositions were entertained concerning its publication. It was finally decided, however, to offer the volume, when prepared, to Commissioner Harris for publication in his annual report. Doctor Harris accepted the same, and it now appears in this form. The editorial charge of the several manuscripts was committed to me, with directions to combine them into an organic whole, so far as possible, and I have endeavored to comply with the wishes of the association.

Monographs were prepared in accordance with the following directions:

The proposed volume will be devoted to a description of school systems and an account of school exhibits shown at the St. Louis Exposition. It will be composed of a series of monographs, each descriptive of a single exhibit and containing—

First. A preparatory essay on the school system represented. [Topics for this were suggested, and a description of the school system of one of the United States was supplied as a model of the kind of description desired.]

Second. An account of the preparation of the exhibit represented. This should be historical in character and should include original features in preliminary circulars, and a brief and orderly account of the steps by which the exhibit was prepared, collected, and made ready for shipment.

Third. A description of the principal features of the exhibit. The following topics are suggested as covering the matter desired, viz, expense, installation, arrangement, contents, principal features, and demonstration. In particular a complete account should be given of unique and original educational work shown in the exhibit, especially experiments of every kind, courses of study, methods of instruction, school devices, statistics, notable schools and departments, and the work of special schools.

Finally, the lessons taught by the exhibit should be drawn modestly, but frankly and fully. They should include those principles of education which the exhibit illustrates and enforces.

Although these monographs were called for by circulars issued on the 4th day of October, and supplementary calls have been made upon all who failed to respond, the collection is not complete, and, much to the regret of the editor, the report does not cover every educational exhibit made at the exposition.

The call for monographs assigned to each exhibitor a definite number of words as the limit of his monograph. This limit was set by the editor after a general examination of each exhibit and an estimate of the amount of space which it occupied, as well as of its educational value. The smallest assignment was to individual institutions, for which a maximum of 300 words was assigned. The largest assignments were made to Germany and to the exhibit of the United States experiment stations and agricultural colleges, to each of which a limit of 8,000 words was set. Some of the manuscripts received have been considerably larger than I could possibly use, and I have, therefore, been compelled to reduce them to the amount of space which could properly be given them. Others have been smaller than I expected. These I have not attempted to improve upon.

Certain considerations have led me to reduce or change some of the contributions; but, as a whole, except in the amount of matter, the monographs are in the words of their authors. Credit has been given to the authors whenever known. In some instances manuscripts were received without signature, and I had no means of ascertaining by whom they were written.

In the strictly editorial work I have been governed by the following principles: The compilation as a whole should be complete in its description of the exhibits; the style should be varied; there should be no unnecessary repetition, and as a whole the matter should be of general interest. No mention could be made of awards, no comparisons between exhibits could be introduced, and complimentary references to individuals must be avoided. Strict application of these principles has materially reduced the size of the work.

The thanks of the editor are due to the numerous contributors, known and unknown, who made the compilation possible. I believe they will find their reward in the value which it possesses for all educators who study it, and, in particular, for those people of the succeeding generation who will have the duty of preparing for the world's next great educational exhibition.

EDUCATION AT THE LOUISIANA PURCHASE EXPOSITION.

BY GEORGE E. GAY.

Education at the Louisiana Purchase Exposition received a recognition at the hands of the managers of the exposition far greater than was ever given to this subject at any previous world's fair. One of the main buildings, in the very center of the exposition, was given up entirely to this department and to the kindred subject of social economy. Here were arranged, with all the skill and fullness which the ingenuity of thousands of investigators could devise, all things that can be presented to the eye and the ear concerning educational systems, methods of school instruction, the means and instruments of school instruction, and the results of school instruction; so that, while the exposition did all that was possible in giving dignity to the subject, educators the world over did all that they could do to take advantage of the opportunity presented. Justice requires that credit in the highest degree should be given also to the chief of the department of education, Howard J. Rogers, and his faithful assistants, under whose direction the department was organized and brought to full efficiency.

The following countries contributed educational exhibits: The Argentine Republic, Belgium, Brazil, Bulgaria, Ceylon, China, Cuba, France, Germany, Great Britain, Hungary, Italy, Japan, Mexico, Roumania, Sweden, the United States.

The following States, Territories, and possessions of the United States made exhibits: Arizona, Arkansas, California, Colorado, Connecticut, Idaho, Illinois, Indiana, Indian Territory, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, the Philippine Islands, Porto Rico, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin.

The following cities had special assignments of space: Chicago, Cleveland, New York, St. Louis.

The following universities and colleges were represented by exhibits: Amherst College, Boston University, Bryn Mawr, University of California, University of Chicago, Christian Brothers' College of St. Louis, Columbia University, Cornell

University, Forest Park University, Harvard University, Holy Cross College, University of Illinois, Johns Hopkins University, Mount Holyoke College, New York University, University of Michigan, University of Missouri, Simmons College, Smith College, Syrian Protestant College, St. Louis University, Vassar College, Washington University, Wells College, Wellesley College, Western College, Williams College, University of Wisconsin, Woman's College of Baltimore, Woman's College, Frederick, Md.; Yale University.

The following technical schools made exhibits: Bradley Polytechnic Institute, Hampton Institute, Manual Training School of Washington University, Massachusetts Institute of Technology, Pratt Institute, Purdue University, Rensselaer Polytechnic Institute, Worcester Polytechnic Institute, the United States experiment stations and agricultural colleges.

The following art schools had exhibits: Art Institute of Chicago, Massachusetts Normal Art School, Minneapolis School of Fine Arts, Museum Art School of Boston, Pennsylvania Academy of Fine Arts, St. Louis School of Fine Arts.

The following special exhibits were made: The exhibit of Brown's Business College, the exhibit of Jones's Business College, the exhibit of Phillips Exeter Academy, the Lutheran parochial school exhibit, the Philadelphia museum's exhibit.

The exhibits were installed in the Palace of Education and were ready for inspection, with few exceptions, on the opening day of the exposition. Very few of the exhibits, however, were complete at that time, and the work of installation continued during the entire month of May and a portion of June; indeed, not till late in June was the work of installation completed. Nevertheless, the educational building was one of the first buildings in the exposition whose exhibits were completely installed.

The amounts of space assigned to the several exhibits by the chief of the department differed very greatly, for in the assignment he endeavored to take into consideration the size and the worth of the exhibits to be made. The largest spaces assigned to separate exhibits were given to Germany and to the United States experiment stations and agricultural colleges. The smallest space assigned was probably 6 square feet, assigned to several of the smallest exhibits. To divide the entire space justly was a work requiring almost superhuman wisdom and skill, and that the division was made in a manner satisfactory to nearly or quite all the exhibitors seems almost beyond belief, but is, nevertheless, true.

The method of installing the exhibits, with the general style of booth and furnishings, was left to the judgment and taste of the individual exhibitors, subject to the approval of the chief of the department. Accordingly, the methods of installation were very numerous. The booths, in general, were planned as separate rooms, with elaborate ornamentation of the outer walls. The interiors were divided into separate alcoves by partitions and by cabinets, shelves, etc., in such a way as to provide the greatest possible amount of space for the exhibition of the various articles brought by the exhibitors. The furniture was as varied as the styles of architecture. There was some uniformity in cases, arising from the fact that nearly all American exhibitors used exhibit cabinets made by the same furniture company; but with these the similarity ended. A portion of the furniture was made by pupils in manual-training schools, a portion by prisoners in penal institutions, a portion by the contractor who erected the booths, and a large amount was purchased in St. Louis. As a whole, the installation was pleasing, the color effects were satisfactory, and the educational exhibit, as a whole, was much superior to that of any other exposition.

The nature of the several exhibits is fully presented in the monographs which

follow, and it is not my purpose to consider them at any length in this preliminary essay. It is necessary, however, for me to make certain general remarks concerning them, designed to be of use primarily to those who shall hereafter have to do with the preparation of educational exhibits, and these remarks naturally fall under two heads—criticisms and commendations.

Among the excellencies to be commended, I mention the following:

First. A simple chaste booth and installation was a great excellence. This found emphatic illustration in some of the foreign exhibits—for example, those of Germany, Sweden, and Japan, which seemed to say to visitors: "Our exhibit is within these walls. We have given it a suitable temporary abiding place here. Your attention is directed to our exhibit, and not to the house in which we have placed it."

Another excellence to be commended was the bringing of furniture made by pupils in technical and manual-training schools of various kinds. This furniture was often especially well adapted to its purpose and was at the same time a suggestive exhibit in itself.

Another commendable feature of many of the exhibits was the large number and the great value of the charts giving statistical and other information in graphic form. These charts, when displayed upon the walls and easily seen, were among the most striking and useful features of the exhibits. Charts which were concealed from sight in cabinets or small alcoves were, of course, less easily found and examined. Charts which showed courses of study, time-tables, and related facts had special interest and value. These charts were numerous in some exhibits and wholly wanting in others. Wherever found, they were well made and told their story simply and effectively.

Models of institutions, grounds, laboratories, etc., were more numerous than at any previous exposition and were most effective in showing material resources. Models are expensive to make, but they show better than anything else what may be called the physical equipment of educational institutions.

Large photographs upon walls, and albums of photographs upon tables, etc., formed a very useful part of the exhibits. As a whole, no doubt it is true that a larger amount of money was expended for photographs than was necessary. This is especially true in those cases where photographs of different objects were practically duplicates of one another. Photographs of one hundred school-houses may tell no more than the photograph of one schoolhouse, and photographs of many classes may give no better idea of school conditions than the photograph of one class. But the photographs, as a whole, large and small, on the walls, in cabinets, in albums, formed a very important part of the exposition, as they must of every exposition.

The manual-training exhibits were, as a whole, excellent and attracted a great deal of attention. They were sometimes very well displayed, and the method of display added very much to the interest which was taken in them. These displays were the most useful which were numbered in series and showed the development of a course of study. Class exercises, showing how well each member of a class had made some particular exercise, had value for the student of manual training but no special value for the general observer. In my judgment the most effective method of mounting manual-training models that was used was the placing of them upon panels covered with black cloth. This background gave to the models a force which no other mount seemed to give.

Maps of a State or county or city, showing the location of school buildings, with their size and characteristics, are always objects of much attention in an exposition, and possibly for this reason are to be commended. But they are very expensive as a rule, and convey little information concerning the conditions of school work and school life.

The method of installation which puts each individual township by itself has little merit in itself, but when combined with the exhibit by subject, as may easily be done, it has certain advantages. Those exhibits of written work and drawing of pupils were best which combined the method by subjects and the method by grades. It should be said that this double method of installation was not common, but it was used by one city at least, and in several States there was a partial use of this scheme. The educator, as a rule, wishes to see in an exposition the development of a subject in accordance with a fixed course of study. He desires to learn how the child takes the various steps necessary to his work and the order in which he takes them. For him an exhibit is most convenient, therefore, which puts the work shown in one subject by itself, where he can follow it from its beginnings in the first grade to its conclusion in the high school. The grade teacher, on the other hand, wishes to see the work of her grade. Often, also, a superintendent of schools wishes to see the work of a grade in all subjects placed together, for in his visits to his schools he is accustomed to inspect the entire work of a grade at once. An exhibit, therefore, that meets the wants of both classes of visitors has the best form, and this form is as easily secured as any other. If thought desirable, the two representations may be side by side in cabinets or they may be separated in different parts of the booth, or they may be of different forms, school work by grades being shown in cabinets, for example, and the development of subjects in albums or portfolios or bound volumes. The city of New York, in part at least, adopted the last method with great advantage to its visitors.

Those exhibits were most visited and most useful which had competent attendants in charge. Indeed, the matter of a "demonstrator" is so important that there is little danger of giving it too much prominence. Exhibits like those of New York, St. Louis, and Missouri had their importance increased several fold by the number and character of those whose duty it was to answer questions and explain the exhibits. An exhibit without an attendant was practically without value to anyone. All intelligent visitors in an educational exhibit have many questions to ask which are not answered by the exhibit itself—questions pertaining to school organization, management, methods of instruction, etc. These questions can be answered only by skilled educationists, familiar with educational history, methods, and means of instruction as represented in their exhibit, and the personnel of the supervisory and teaching forces. Far better for a State or city to leave its exhibit at home than to send it to an exposition without a competent attendant.

Books and pamphlets for distribution formed one of the most valuable portions of the exhibits. It would seem from the frequent calls for them that no other feature of several exhibits was so valuable. A series of pamphlets like that supplied by the city of Milwaukee forms a permanent exhibit that one may easily take with him to his home.

Certain criticisms on the exhibits seem pertinent in this paper. Some of them have already been indicated in preceding paragraphs.

A common criticism of most of the exhibits was that the written work did not represent the daily work of the schools. Visitors often remarked of written work that it had been corrected and copied by pupils, or had been corrected by teachers before copying. In general, I think, it may be said that the written work of the pupils as shown in the cabinets and in the bound volumes was, to many people, the least satisfactory part of American exhibits. The remedy for this is, of course, at hand. If written work is designed to show the ordinary written work of school pupils, it must be collected day by day throughout a school year without any knowledge on the part of pupils or teachers that the work is to be placed on exhibition. Whether such work would have any special

value I do not know. It seems to me that the value of written work lies almost wholly in the suggestions which it gives for methods of instruction and courses of study, in showing what superintendents and teachers believe it worth while for school children to undertake. Whether the work has been corrected by pupils and copied, whether it is "regular" or "special," seems to me to be of little consequence. But if I were again to prepare an exhibit of school work for an exposition, I should endeavor to secure the work of each day of a school year taken from the usual exercises—good, bad, and indifferent—without the knowledge of pupils or teacher that it was to be preserved. It is this kind of work which is always shown by Germany and France, and it has great interest always for visitors.

Another criticism which may be fairly made touches the superabundance of manual training exhibits. Some of the exhibits seemed to say: "The schools of this city or State are devoting themselves almost wholly to instruction in manual training." Properly, I think, the amount of the various kinds of instruction displayed should correspond to the time given to the several subjects in the daily programme of school exercises. Thus would the exhibit be a correct picture of the school.

Another criticism lies, as indicated above, in the lack of suitable attendants. One great country left its exhibit, for the most of the time of the exposition, in charge of a janitor without special knowledge of schools; and more than one of the exhibits from America were left for a large portion of the time in the hands of incompetent persons. By this means the reputation of the country and the States was injured. In one instance an exhibit that had cost some fifteen thousand dollars to prepare was left for months in charge of a person who had no acquaintance whatever with any department of school work above the primary grades. In some States there was a frequent change of attendants, whereby a person was discharged as soon as he became skillful in his work.

A further criticism may justly be made respecting the haste with which many of the American exhibits were prepared. In some instances it was January 1 or later before the first steps were taken toward the preparation of an exhibit. This was most unfortunate. The proper preparation of a large exhibit requires a long time. First of all, the general scheme of arrangement has to be decided upon. Then comes the preparation and selection of the materials of which it is to be composed. Here no one person's thought is sufficient. The combined wisdom of all who contribute to the exhibit is necessary. To secure this wisdom means time and travel on the part of the director. The ideal method for preparing the school exhibit of 1904 would require the beginning of preparations to have been made in September, 1902. A whole year could then have been devoted to thought and selection of material; an interval of six or eight months would have intervened, and then the final arrangement of material would have been begun. All the larger exhibits required from one to two months for installation and arrangement, and the largest required even longer time.

A further criticism may be made of those exhibits in which there were not sufficient printed directions and labels for the articles exhibited. In an educational exhibit the meaning and value of everything depends upon the circumstances under which it was prepared, and these circumstances should be fully shown. In the case of written exercises, whether exposed singly in cabinets or bound together in volumes, a full statement from the teacher should always be placed beside the work shown, a statement including all the conditions connected with the work and making the same general explanations which she would make to a visitor who saw her pupils engaged upon similar work in her room. Some exhibits were apparently displayed in any manner which would fill the space at command. If a picture or case or book fitted into a vacant place,

it was fastened there without reference to the work which adjoined. A logical arrangement, whereby the whole is seen in relation to its parts, and the parts are seen as components of a unified whole, is, of course, absolutely essential to any installation worthy of the name.

Some exhibits were open to the criticism that they showed other things than school systems and school work. This criticism applies to comparatively few of the exhibits, however, and is perhaps not likely to be repeated in future expositions.

The lessons of this exposition have been carefully drawn by Dr. Howard J. Rogers, chief of the department of education, in a paper read before the National Educational Association at its meeting last July, and reprinted from the proceedings of this association as a part of this chapter. Several minor lessons not drawn by Doctor Rogers seem to be worthy of record, as follows:

First, the business ability of the American schoolmaster was very much in evidence in the Palace of Education. It is customary for school men to be told that they lack the supreme excellence of business ability, and many of us have accepted the statement as necessarily true. We shall accept it no longer. The whole history of the work done in and for the Palace of Education goes to show that no exhibits were more skillfully planned or better displayed or better managed than were the exhibits in this building.

Second, the exhibit showed, both by the prominence given to it by the exposition authorities and by the large attendance throughout the entire season, the importance which the American people attach to the subject of popular education. Perhaps no other building received more careful and intelligent attention or excited greater permanent interest than did the Palace of Education.

Third, we were all impressed with the value assigned to manual training and industrial education by our visitors. It may be said that much of the admiration expressed was irrational and based upon very slight knowledge of the subject; but a large portion of it was certainly the expression of the honest opinion of intelligent citizens anxious only for the well-being of their children and of the schools. Hand work and head work are henceforth to be united in all American schools.

Fourth, the prominence given to the exhibition of the bonds that unite home and school is evidence of one of the best features in the newer education, and was manifested in all the educational exhibits. Perhaps it was in part the natural reaction of the home which manifested itself in the great interest shown by parents in the school work of their children as displayed.

Fifth, the doctrine that school is the preparation for life was emphasized and enforced everywhere. The great exhibit of Belgium, in the Belgian building, proclaimed this principle most emphatically, perhaps, of all the exhibits, writing it in large letters upon its very door posts. But it was manifested everywhere, except in those exhibits which represented the scholasticism of previous centuries, and even these seem to have been modified to some extent by the theory which has taken such firm hold upon modern school life. China itself showed side by side the old and the new. We could not understand the old, but the new spoke a universal language.

Sixth, the exhibit showed most clearly that the educational cauldron is seething in every country. Experimentation of the most serious kind in the education of the youth is going on all over the world, and the end is not yet. The monographs which form this compilation will prove interesting to students of education in part because of the experiments which they relate.

Seventh, interesting lessons may be drawn from comparisons which naturally arise respecting American and European views of education and the methods by which public education is promoted in different countries. The limits of

this essay do not admit of an extended discussion of this subject; but I can not forbear to raise the question, whether our common, lazy statement that European education is best for the Europeans and American education is best for the Americans, is as true as we think it is. For my own part, I am convinced that we have much to learn from Europe and that Europe has much to learn from us. Great expositions are forceful teachers, not alone of the differences in practice between ourselves and others, but also of the principles which underlie practice.

The supreme object of an educational exposition is not comparison of school exercises, or school curricula, or school methods, or even manifestations of school spirit. Indeed, such comparisons may be harmful. The supreme benefit of an exposition like the one described in this volume is in its suggestiveness. What is my neighbor doing? What is he doing better than I am doing the same? Why is his work better than mine? These are the questions which the visitor should ask.

The work which the schools are doing is, of course, not writing exercises or making models or drawing pictures; but the work of the school is the development of power, the increase of knowledge, the evolution of character. If the exhibits here described have promoted these ends, the time and labor and treasure bestowed upon them have not been so bestowed in vain, but will bring rich returns in every schoolroom in which their influence is felt.

THE LESSONS OF THE EXPOSITION.^a

BY HOWARD J. ROGERS, CHIEF OF THE DEPARTMENT OF EDUCATION AND DIRECTOR OF THE CONGRESSES OF THE LOUISIANA PURCHASE EXPOSITION.

In an exposition the directorate proposes, but the exhibitor disposes. The classification may be perfect in its logic and comprehension, the space for installation and time of preparation ample in extent, the plan of arrangement thoroughly approved and appreciated; and yet the right-hand member of the equation, composed as it is of a great number of factors varying in time, money, capacity, and interest, and all involved with that variable quantity, human nature, renders its solution extremely difficult. Probably the perfect educational exhibit will never be made till some benevolent person provides at least a half million or more for the purpose, so that material may be collected and installed about a well-defined plan and under the guidance of a single mind. This would be an educational museum. It is doubtful, after all, whether that would have the popular attraction and human interest of an exposition, where variety rules and where the limitations of one exhibit bring into bolder relief the excellencies of another.

In this brief discussion of the St. Louis educational exhibit I am estopped officially from drawing comparisons, inasmuch as the jury of awards has yet to pass upon the exhibits, and the States and nations here assembled are still in a sense our guests. Some general observations may, however, be of interest.

First, at the risk of some repetition of former statements, I must sketch the object of the exhibit. Not everything can be shown in an educational exhibit. It is a common expression that you can not exhibit the finer parts of education—that you lose the spirit and personality of the class room. It is true that you can not exhibit this. I sometimes wonder, in the present days of ticktack routine, if our teachers would recognize it if we could. But neither in an agricul-

^a Reprinted from the Proceedings of the National Educational Association, meeting of 1904.

tural exhibit can you exhibit the rural peace and environment of field and forest which mold the nature and the labor of the farmer. In education, as in agriculture, we can exhibit the course of study as well as the rotation of crops, the methods of instruction as well as the methods of planting, the machinery and the equipment for the work, the products of the laborer and the comparative results of his labor. We can exhibit enough to be of interest and value to the student and establish a clearing house for suggestive ideas whose influence will be carried to every quarter of the world.

The great results which have followed educational exhibits in England, in France, and in America are the best demonstration of their value. In the preparation of the educational exhibit at St. Louis there were two points made prominent—the participation of foreign nations, in order that a comparison might be instituted between the educational systems of the various countries of the world noted for educational progress, and the thorough presentation of every phase of education in the United States, as exemplified in our public schools, our colleges and universities, our technical and professional schools, art, agriculture, defectives, and special forms of education.

In the preparation of the classification, made with the advice of a special committee consisting of Doctor Harris, Doctor Butler, and Superintendent Jones, of the National Educational Association, the field of education was divided into eight groups, as follows:

Group 1—Elementary education.

Group 2—Secondary education.

Group 3—Higher education.

Group 4—Special education in fine arts.

Group 5—Special education in agriculture.

Group 6—Special education in commerce and industry.

Group 7—Education of defectives.

Group 8—Special forms of education: Text-books, school furniture, school appliances.

In its comprehensiveness the participation in the exhibit fully reaches our expectations. Thirty-three States and Territories, four cities, and fifteen foreign nations have contributed to the elementary and secondary groups. Twenty-eight colleges and universities and eight professional and technical schools are exhibitors in Group 3. Seven of the best art schools of the country have, for the first time, made a classified exhibit. The agricultural and mechanical colleges, under a special grant of \$100,000 from Congress, have made a collective exhibit, which you are invited to examine carefully as upholding in every detail the high grade of special instruction given in our farm laboratories. In Group 6—"Commercial and industrial education"—the business college and commercial high schools and industrial and trade schools have contributed many exhibits. In Group 7—"Education of defectives"—the Convention of American Instructors of the Deaf and the American Association of Instructors of the Blind have combined to maintain a working exhibit, in order to demonstrate to the general public the thorough work which is being done for children deprived of all their normal faculties, and further to demonstrate the fact that the results of this instruction are so beneficial as to warrant the same care and maintenance on the part of the state as for normal children. In Group 8—"Special forms of education: Publishers and school equipment"—the exhibits are many and instructive. We feel, therefore, that we have gathered here a basis for comparisons and generalization from which inferences and truths of value may be derived.

We regret to say that the strenuous life of the preparatory days of an exposition has not permitted us to make a careful study of the exhibits, but in the examinations we have made two things seem to us to stand forth so prominently

at every turn that they can be termed the pivotal points of the exhibit. The first is the similarity of the exhibit from every State and city in the United States, demonstrating the fact that we have a national system of education, and the second is the subordination of the humanities to industrial instruction in the exhibits of foreign nations. I hinted at something like this three years ago at Chicago, as inferences from the Paris Exposition, but they were not then so clearly borne in on my mind, nor did they then occupy so completely the objective points of vantage.

Concerning the first point, it is impossible for any person to go from State to State in this exhibit and detect any radical distinction in the work presented or the methods illustrated. Such as does exist is entirely local in its reason, and is the evidence of the personality of the superintendent or the progressiveness of the community. There is no greater difference between Syracuse and Los Angeles than between Syracuse and Binghamton. It is a satisfactory and gratifying condition. The simultaneous advance along any line of progress of a nation vast in extent and power is an impressive fact. It indicates a flexibility of the mind and a solidarity of purpose which would be irresistible applied to any problem. There are the same elements of strength in the union of ideas and mental training of every section of a great country as in its physical and constitutional union. At the same time, I would not have it understood that there is a stereotyped form of processes in exhibits. There is enough originality and expression of experiment to insure against any possible danger of machine routine.

If it were asked why the educational systems of forty-five States, each under a separate, independent government, separated by tradition, clime, and culture, show such unity, I would assert that it is due to two causes: First, to the United States Bureau of Education, under the able guidance of its great chief, Doctor Harris; and, second, to the influence of the National Educational Association. The Bureau of Education can not arbitrarily shape the policy of any State or section, but so wisely has the power of suggestion been used, so forcibly has the inference from statistics been drawn, and so clearly has the comparison of systems, foreign and domestic, been set forth, that our educational policies from East to West have by force of logic formed in parallel columns. Nor should we omit to mention, as a most directive force in this regard, the personal influence of the United States Commissioner of Education.

The second reason advanced for this unity—the influence of the National Educational Association—is very apparent. Drawing its constituency from every part of the Union, meeting once a year in numbers, and twice a year through its superintending officers, there is a constant interchange of criticism and information which holds in close relation every component factor. The special investigations of its committee of fifteen and committee of ten show in the curriculums of hundreds of elementary and secondary schools. There is no need to dwell on this point. The arguments are apparent as soon as it is mentioned, but its practical demonstration seems set forth so clearly in the exhibits about you as to form a great and accepted fact. I ask your careful examination of the exhibits with this point in view, and your acceptance or criticism of the statement.

The other main point emphasized by the exhibit—the subordination in foreign countries of the humanities to special industrial instruction—can be proved by preponderance of evidence, if by no other means. Three nations participating in the exposition have thought it advisable to portray their educational system in a foreign land, and in comparison with other systems, in no other group than

in technical and industrial education. In two others the predominance of the exhibits of this class serves to accentuate the main point. In the remainder the relative proportion is greater, with the exception of one, and in this one only is there something of a balance maintained between the two great lines of the mental development of the child. It is not my province at this time to discuss the tendencies of European and American elementary instruction. They are based on different theories of national maintenance, founded on different aspirations and traditions, and require comprehensive treatment. The statement that the illustration of this difference is found in the exhibits all about you is sufficient for this purpose.

These are to me the two main points of the educational exhibit.

A minor point is the scientific character of the exhibits and the exploitation of lines of research. This is, of course, a scientific age, and exhibits of the universities would naturally assume that form; but the tendency of each institution to lay stress upon some few lines of investigation is striking. Perhaps in this connection it may be said, without being open to the charge of discriminating between exhibits, that the exhibit of the German university laboratories in chemistry, physics, and biology is one of the most thorough and instructive displays ever made. Everything has its reason, and this exhibit seems to me a magnificent attempt on the part of Germany to demonstrate that in the field of special training, particularly in biology and medicine, her universities are still the foremost in the world. In view of the marvelous advance of American universities in this respect in the last fifteen years, and the acceptance of the idea that it is no longer necessary for American students to be trained abroad, the exhibit assumes a new and interesting aspect, even if it may not be assumed to become historic.

In the scientific group our own most noteworthy exhibit is that of the agricultural and mechanical colleges of the country, which have made a collective exhibit under the special appropriation of \$100,000 made by the Congress of 1903. If there can be demonstrated to the public the great ulterior economy in the liberal maintenance of these institutions, a most important benefit to the country will have been insured.

In the same spirit has been undertaken the collective exhibit of the Association of the Schools for the Blind and the Schools for the Deaf, in which working classes will be maintained throughout the exposition. No greater lesson could be taught the great public than to demonstrate beyond a doubt that the education of those defective in some physical respect is as much a duty of the State as the education of those normally endowed, and remove forever from their thoughts the idea of its being in any wise a charity.

Such are some of the more general lessons of the exhibit. There are scores of minor ones apparent to your close observation, which you are cordially invited to make. The exhibit has many strong points; it has some weak ones. There are some exhibits of institutions concerning which, to use the remark of our humorist philosopher, "it would have been money in their pocket if they had never been born." But, as an average, we believe the exhibit is high, and we ask for it your careful study and frank criticism.

In conclusion I beg to express publicly my thanks for the sympathetic cooperation of foreign countries in promoting the exhibit; for the magnificent support of the States and cities, and for the loyal assistance of the colleges, universities, and technical schools, many of which acted either through personal friendship or from a sense of duty in supporting an educational enterprise.

THE EDUCATIONAL EXHIBIT AT ST. LOUIS.^a

BY ANNA TOLMAN SMITH, MEMBER OF THE JURY OF AWARDS.

An exposition to be successful must be spectacular. This is the quality that attracts the people, and it is only when the attendance rolls up in the hundred thousands that the enterprise pays. It has thus come to pass that the original purpose of expositions, which was instruction, has given way to display for commercial ends and sensational effects.

At Paris in 1900 the educational idea again prevailed and at St. Louis it has been made supreme. Said Mr. Skiff, in an address outlining the enterprise at its inception: "Modern man is the theme of the St. Louis classification. Its grand departments represent what man has accomplished up to this time with his faculties and the natural resources at his command in the environment in which he has been placed. Therefore we find in this classification that education is given the leading position, because through education man enters life's activities."

In pursuance of the purpose thus expressed a special building was erected for education, the first time in the history of expositions that the chief collective activity of civilized peoples has been thus honored. The site chosen was a commanding one and the building, though a departure from classic styles, preserved the true spirit of Corinthian beauty. It had been planned in advice with the director of the department, Mr. Howard J. Rogers, to whose practical suggestions were largely due its admirable adaptations to its specific purpose and the skillful disposition of its varied material.

The interior of the building was divided into a central court surrounded by broad corridors. In the allotment of space the north corridor was assigned to our State and city exhibits, the west corridor to colleges and technical schools, the east to schools for special classes, the south corridor to the exhibits of social economy, and the central court to American universities and the exhibits of foreign countries. Thus space and system combined to enhance the beauty of the separate installations; so striking indeed were many of these that it was difficult to fix attention upon anything else; even experts wandered up and down in the mere satisfaction of gazing at harmonious outlines and coloring. All styles of installment had been employed, the closed pavilions offering broad façades for decoration, the open alcoves marked off by low railings or slender columns with free access for light, and ingenious combinations of the two extremes. Indeed, the first and most lasting impression made by this department was that of the art of display as applied to the exhibit of an ideal process.

In a survey of the varied subjects comprised in this collection, higher education comes first to mind possibly because of its commanding position in the general arrangement. Entering by the northwest door from the grand plaza, one came directly upon the imposing exhibit of the colleges of agriculture and mechanic arts and experiment stations, prepared under the direction of a Government board and with the aid of an appropriation by Congress of \$100,000.

The purpose of the exhibit "to represent those features of education and research which differentiate" the colleges named "from other educational and scientific institutions" was thoroughly maintained. It was arranged in two great sections, i. e., agriculture and mechanic arts, each subdivided into departments. Centrally located in the exhibit was an office around which were grouped exhibits of the Bureau of Education and of the Office of Experiment Stations, which represent the United States in its relations with these particular colleges and stations.

^a Reprinted by permission from the Educational Review for December, 1904.

The agricultural exhibits attracted most attention, and especially those relating to plant production, to animal industry, and to the dairy laboratory. Naturally also popular interest centered in the simpler problems illustrated. Tests of milk which any housekeeper might employ, methods of soil enrichment, proof of the feeding quality of animal food, the retarding of fruit blossoms by spraying the trees—these and a hundred other ingenious processes appealed at once to the curiosity and the self-interest of the multitude; at the same time they illustrated the importance of research and the practical applications of scientific knowledge.

This exhibit particularly impressed foreign experts, who, if they claimed for their own institutions higher development in respect to agricultural science, admitted that they had much to learn from us as to the means of diffusing this knowledge. They were astonished also at the growth of the colleges as set forth in conspicuous wall charts. Beginning with 3 colleges and 226 students in 1865, they number to-day 65 institutions with 28,000 students. Their property valuation is about \$71,000,000 and their annual income above \$10,000,000, a tenfold increase in less than two decades.

The sense of science as a force in higher education was deepened by the university exhibits; especially by those of our own country and of Germany. The State universities of the West made elaborate display of their equipments for laboratory research, for engineering, for industrial chemistry, and in a few instances gave large space to their agricultural work. Harvard, Chicago, and California universities by their exhibits of celestial photography emphasized the most imaginative of the sciences. But it was Germany—home of philosophy and classical learning—that expressed most completely the scientific aspect of modern learning. Peculiar dignity was imparted to the exhibit of German universities and higher technical schools by the court of honor through which it was approached. Facing the entrance to the court was the bust of the Emperor, and in repositories on the walls works contributed by the German academies of science. The room beyond was set apart for "Excavations," which formed a unique feature of the section. Here were shown models of the Roman citadel, Saalburg, as reconstructed by order of the Emperor, photographs of the restored temples of Jupiter Heliopolitanus, and on the wall copies of five Babylonian flagstone pictures reproduced in all their vivid coloring. These objects pertain indeed to the "humanities," but they illustrate the scientific method in historical study.

The culminating point of this exhibit was reached in the rooms assigned to medicine. Prepared under the direction of eminent specialists, this exhibit disclosed the full significance of science both as principle and method. Of the departments into which medical science has been resolved five had been chosen for representation and grouped around a central hall fitted up for lectures and demonstrations; to these was added a Roentgen cabinet furnished with the newest apparatus. In the several departments were shown the results of research and methods of class demonstration, with the appliances, instruments, models, photographs, and cultures, at the disposal of the professors. The only other exhibit comparable to this section was that of Johns Hopkins medical school, which illustrated by plates and drawings the same high order of research. The latter was, however, purely scientific in character, whereas the German exhibit carried one into the class room.

Although science and its handmaid, technics, were prominent in the German section of higher education the spirit of ideal culture was not wanting. It found visible expression in the busts of eminent men—Goethe, Kant, Humboldt, Mommsen—and in beautiful statues like that of the Athena Lemnia which adorned the university room. The exhibit included also elaborate and beautiful views

of buildings and equipments, representing altogether thirteen universities and eleven technical colleges.

The three features of the German exhibit here distinguished, the scientific, the educational, and æsthetic, were repeated in all the university sections. It was the excess of one or the other that gave distinctive character to each. Thus to name the principal foreign countries represented, Germany had the best-balanced exhibit; France showed only views and the published works of her eminent professors and savants, while Great Britain by a series of exquisite photographs brought vividly to mind the beauty, natural and architectural, of her ancient seats of learning.

In the case of the United States, which presented above twenty higher institutions as separate units, it is impossible to name even the many striking features. The complete models of site and buildings presented by several universities, notably by the University of Wisconsin, Washington University, and the University of New York, excited universal admiration. Harvard showed a fine model of its students' stadium and, on the scientific side, a remarkable representation of intestinal digestion as seen under the Roentgen rays, and a case of the exquisite Blaschka glass models for botanical study; Columbia, a model of the beautiful new library building with the majestic statue of alma mater in the foreground, and Yale suggested the highest outcome of university life by portraits of famous alumni. For æsthetic effect pure and simple, the exhibits of the University of Michigan and of Columbia University surpassed all their sister institutions, while the University of California excelled in photographic representations. The transparent views of her mining school, including class, laboratory, and field operations, afforded the highest example of this mode of exhibit as regards technical finish and illumination.

But the special value of the university exhibits was in the conditions they illustrated rather than in their actual material. The lavish equipments answer to the expansion of knowledge and man's increased control over the forces of nature; beauty of environment and of architecture, to the hunger of the spirit for ideal things. Lessons such as these could not fail to be caught by the mere casual observer, while the nature of the subjects selected for representation brought clearly to mind the lines of recent progress in matters and methods of university instruction.

Impressive, however, as were the exhibits of higher education, the great surprise of the Educational building was the magnificent array of public systems of education. As regards æsthetic effect the installations surpassed all previous efforts of the kind. In the case of the foreign nations the decorative treatment of the external partitions of their respective sections conformed in a measure to the national type. Thus harmony of color and graceful designs marked the façade of the French pavilion. It was composed of alternating panels and niches, the whole surface finished in a neutral tint that harmonized well with the decorative elements. Each panel showed a shield depending from a lion's mouth and bearing on the blue field the names of great artists, litterateurs, or scientists. Around the shields hung in long sweeping curves a design of grape vines in full leaf and fruit. Large ornamental vases occupied the niches, and the apex of the arched entrance bore the gilded monogram of the Republic. The symmetrical regularity of this beautiful façade accorded well with the logical structure of the educational system which it inclosed, a system thoroughly organized and classified and so uniform in its results throughout the country that as regards the schools of general education, elementary or classical, a single one of each class affords a fair representation of all. Below the universities, complexity and variety are found only in the technical schools adapted

to local conditions. The latter, which are under the minister of commerce and industry, occupied one side of the French pavilion and the schools for general education and the universities—all under the minister of public instruction—the other. Paris exhibited separately in the same pavilion the work of her celebrated special schools (art and industrial), and also municipal activities relating to sanitation, charities, and similar matters.

The space assigned to Italy was bordered by a plain partition hung with beautiful engravings of her masterpieces of art, an eloquent expression of undying fame. The impress of the age which produced them is still seen in the ordinary art work of the Italian schools and of those of all other nations where the Latin influence prevails.

The design for the sculptured and pictorial decorations of the German section were drawn from school life. Especially noticeable were the main entrance to the school exhibit, a reproduction of the portal of a Berlin schoolhouse; reliefs on the outer wall representing groups of German school children, and in the center of the entrance room the statue of a female figure symbolizing education.

As a rule, even where the æsthetic quality was not marked or was even altogether wanting, the installations were admirably planned; in this respect, indeed, great advance has been made since the Chicago exposition and even since the Paris exposition of 1900. Naturally, where the system of education is highly centralized, as in France and Japan, the task of organizing an exhibit is comparatively easy; the difficulties increase in proportion to the degree of local and institutional independence. Great Britain, which represents the extreme of such independence, presented at St. Louis for the first time a well-organized exhibit in striking contrast to the confused state of the material shown at Paris. The result was effected without obscuring either the freedom of institutions or of local administration through the careful selection both of the material to be presented and the mode of display. Only typical things were chosen—for example, the art work of schools distinguished for success in this branch, views illustrating the characteristic life of the great endowed schools, or the work of institutions like the London polytechnics adapted to special conditions. In all the aim was to show essential features and high achievements.

The same purpose was apparent in the selection of students' work in the Japanese section, but here the selected material was supplemented by full sets of programmes, curriculums, and material appliances for the teacher's use. The exhibit as a whole possessed many remarkable features and was characterized by the perfect finish of every detail.

The plan adopted by Germany for the display of its very composite system was that of the complete presentation of selected types of schools and groups of schools, city and country, elementary, secondary, and industrial. The exhibit of each type was arranged in a separate room plainly marked by a sign giving a list of the contents. Many of the rooms were further distinguished by some appropriate work of art. Thus a beautiful portrait of Queen Louise adorned the room devoted to high schools for girls; a bust of Melancthon, the room devoted to the material for religious instruction; a bust of Herbart, the room containing the most important recent works on education. Throughout this extensive exhibit, from which nothing pertaining to school activities had been omitted, there was the evident intent to present also, symbolically, the historic relation of those activities.

The educational exhibit of Sweden though limited in space was one of the best planned and most suggestive in the entire building. That of Belgium, which was placed in the State building, offered among other impressive lessons a remarkable example of the exhibit of a complete course of instruction in natural

products and the local industries pertaining to them. The course was developed from grade to grade on the concentric principle, the subject selected being flax and its treatment in field and factory. The presentation excited great interest, by reason both of its complete illustration of an educational principle and its effective display. Ranged on the wall in a series of open cases, and with explanatory charts at every stage, it was easily seen and readily comprehended.

The separation of the Belgian exhibit from those in the education building was partly compensated for by the chance of seeing education in close relation with other forms of public effort for the general welfare. Thus indeed was realized the idea suggested by the inscription on the palace of education, namely, "Education and social economy."

The exhibits of Spanish-speaking countries of the Western Hemisphere illustrated in a striking manner the conflict between mediæval ideas and those of the present age. This was particularly noticeable in the case of the Argentine Republic and of Cuba, both of which exhibits had been so planned as to emphasize progress in the adoption of modern ideas and methods.

Altogether 22 foreign countries were represented in the educational department. Our brief survey of their principal exhibits indicates the success of the endeavor to make the collection international not only as regards the number of nations included, but the forceful presentation of distinctive features of their systems. To aid in the understanding of these features explanatory literature, historic and descriptive, was lavishly supplied, and in many cases—notably in that of Sweden, Belgium, Japan, and Germany—with duplicates of the originals in the English language.

The school exhibits of our own country represented 31 States, 3 Territories, and 5 cities, having separate installments. Of this number, 5—Massachusetts, New York, State and city, Missouri, and St. Louis—may be taken as the highest types. Each illustrated a distinct principle of arrangement, carried out with lavish expenditure of money and directive ability.

The controlling principle of the Massachusetts exhibit was that of an educational ideal expressed in the practical work of schools. To prevent the ideal being lost in endless duplications, the endeavor had been made to secure the complete representation of each branch of the course of study as carried out in some one or two cities. The material was presented in three forms. In wall cabinets were displayed select examples of written work from the successive grades up to and including the high schools, the collection in each cabinet being clearly indicated by an explanatory chart; below the cabinets extended glass cases filled with additional work, often of a special character, and in closets beneath were placed bound volumes presenting the entire work of successive classes in the subject of the group. The wall space immediately above the winged cabinets was reserved for manual work, arranged also to show the development of the subject from grade to grade. Photographs of classes at work, gymnastic drills, etc., gave living interest to the programme, while on the upper wall spaces were exhibited large photographs of model school buildings. By this general arrangement it was possible for one to take a rapid survey of the entire operations of the schools or to make an exhaustive study of some particular subject.

The collective exhibit of the 10 State normal schools, which was placed in central cabinets, followed the plan of presenting the ideal of professional training without duplicating details. Other exhibits in the collection were those of the evening schools of Lowell, selected as typical; of the Trade School of Springfield; of the schoolship *Enterprise*, and a select exhibit from the Massachusetts College of Agriculture. The view of the State system was completed by a concise presentation of the administrative features and very full statistical charts.

The exhibit of the city of Boston, which occupied a separate alcove within the same inclosure as the State exhibit, excited the admiration of educators from every part of the world. The mode of exhibit was the same as that adopted by the State, every branch of the curriculum being fully represented by the regular work of the pupils in bound volumes and by typical specimens in the winged cabinets. The value of the presentation was greatly increased by an accompanying view of the whole school programme, so arranged as to show the absolute number of hours and the relative proportion of the entire time given to each subject daily, annually, and throughout the course. Among special features indicating the liberal policy of the city was the work of the industrial centers and vacation schools maintained at public expense.

The pavilion inclosing this admirable exhibit was a model of noble simplicity. The ground tint of olive green gave effect to the beautiful colored designs from the technical schools which adorned the external panels. The frieze bore the names of the principal towns, indicating their independence in school affairs, while the beautiful seal of the State on medallions between the names preserved the sense of their common relation. The projecting base of the frieze formed the support for busts of eminent men, statesmen, poets, and philosophers identified with the Commonwealth. One wall displayed a unique map indicating by pictures of the buildings the location of three hundred public libraries in the State, and the panels on either side of the main entrance were inscribed with the names and dates of the principal laws pertaining to the public school system. Just within the door stood a commanding statue of Horace Mann, the father of the system. Nothing was in excess, nothing superfluous; every detail contributed to the complete harmony.

The exhibits of New York, State and city, which occupied adjoining booths in a continuous inclosure, represented the exact opposite of the Massachusetts exhibit. The aim in the Empire State was to present the whole educational provision, public and private, with complete fullness of detail. The result for both State and city was a wealth of material, requiring great skill for its systematic display. The arrangement of the exhibit followed the French classification, in three groups—elementary, secondary, and higher. The elementary was again subdivided by school grades—assigned singly or by groups of two and three to separate alcoves. Thus all the kindergarten work was found together, and so on through the eight succeeding grades. It was noticeable also in the State alcoves that each city was assigned its own place, cities and villiages being grouped according to population. Minute explanations accompanied every section, so that teachers could readily examine the work of their special interest with full understanding of the conditions under which it was produced. The high school work was arranged by subjects, following the plan of departmental teaching.

Striking features of the State exhibit were a model of the new State Normal School at Fredonia, made by the students of the manual-training and art departments, and a series of graphic charts comparing the educational operations of New York with those of the United States as a whole. Among other items, it was shown that the State, with a population one-tenth that of the entire country, bears nearly one-sixth the total public school expenditures, the relative proportion in 1903 being exactly \$41,418,095 on a total of \$235,208,465. The spirit of this composite collection was typified in the map which hung on the outside wall, indicating the location of every institution of learning in the State, the material used in its construction, and its seating capacity.

The exhibit of New York City continued the impression of abundant material and admirable system. The most novel features were those relating to measures for adapting the public school system to the varied conditions of an immense population, for extending its activities beyond the limited school period and

turning it to the service of the adult masses. To this extension work belonged photographs illustrating methods of physical training applied to weaklings, the cabinet pertaining to the free lecture system, the collective exhibit of vacation and evening schools, and the views of recreation centers, showing industrial and social features. Comparison was naturally suggested with the similar though less extensive collections in the exhibits of Boston and Chicago, which emphasized the elements of intellectual training for adults, and with the exhibits of the London polytechnics, which, like the extension work of New York City, place great stress on the social features.

The external side of the city booth was utilized for the exhibit of the Woman's School of Design, a private enterprise conducted in a philanthropic spirit. The exhibit consisted of a remarkable collection of original designs, which, with one or two exceptions, were purchased by manufacturing firms as they stood on the wall.

The signal lesson of the entire exhibit was that of great municipal problems and their possible solutions.

The exhibits of Missouri and of St. Louis, although on opposite sides of a broad aisle, can hardly be considered apart, as they followed the same general plan of arrangement and decorative treatment.

In both equal emphasis was placed upon results and processes; the former were shown by the work of pupils in lavish profusion, the latter by every available device of art, visual and audible. The written exercises and drawings from each grade of schools were assigned to a separate alcove, typical exercises being placed in winged cabinets along the wall, and the entire work of classes in bound volumes beneath. No effort had been spared to render every detail intelligible. The conditions under which each volume and separate exercise had been prepared were explicitly stated, the length of time the subject had been studied, and the time allowed to it throughout the course. So carefully was the labeling carried out in the State section that the work of any one of the 200,000 contributing pupils could be readily located. In this section, also, hundreds of pictures in crayon, ink, water colors, and oil, showing school buildings, playgrounds, groups of pupils, etc., adorned the walls, while moving pictures and photographs animated the scene.

It is difficult to express in words the magnificent effect of the exhibit of the public schools of St. Louis. It was spectacular and yet essentially instructive. The illuminated Christmas tree in the kindergarten section, the ingenious constructive work from the grades, the moving pictures of school scenes, the portraits of distinguished educators, the paintings, engravings, and casts loaned by various schools, the remarkable display of special lines of work and illustrative devices, and the living exhibit of a veritable class room, with daily exercises, attracted delighted throngs, but each feature was also full of suggestion to the professional visitor. From the æsthetic standpoint the distinguishing feature of this unique section was the façade, so constructed as to form an integral part of the interior exhibit while giving character to the external view. It consisted of 16 square hollow columns, connected by arches, in the style of a Roman triumphal arch. On the alcove side the columns framed illuminated photographs showing, in orderly sequence, typical school exercises. On the aisle side they were paneled with a series of 16 transparent paintings, representing a history of education. The choice of subjects—which included scenes from primitive life, from classic, mediæval, and modern history—the composition, costuming, and painting were all the work of an art teacher in the St. Louis high school, the personnel of the groups having been selected by her from teachers and pupils in the schools. The medallion portraits of children and

youth in the spandrels above, and the illumined transparencies in the facing columns inclosing the State section heightened the effect of this brilliant series. It was, indeed, as expressed by one of the foreign jurors, the mission of St. Louis to excite popular enthusiasm and gratify critical taste at one stroke; in other words, to attain the ideal end of an exposition.

The exhibits here dwelt upon have been selected because they represent characteristic types. They do not, however, exhaust the striking features of the vast collection. The Pennsylvania section made a fine impression with its massive columns and panels of polished wood; California, with its façade of the native redwood, and Minnesota, by its air of elegant refinement. Indiana charmed the eye by a simple harmony between the framing woodwork of its cabinets and the tinted paper that lined the glass doors, and Denver gave a rich note of color by its tissue-paper art windows, original both in design and material. The general aspiration toward the beautiful must be taken as one of the most significant lessons of the exposition, a sign of spiritual forces working their way to the heart of the people.

There were exhibits also which with no attempt at æsthetic effects made lasting impressions by their system. This was particularly marked in the case of Kansas, which presented at a glance the most important features of an educational system in an agricultural State. The limited space occupied by the exhibit was divided into two sections by a narrow aisle. To one section was assigned higher education, subdivided into university, county high schools, and normal schools, each occupying a separate alcove; to the other section, elementary education, comprised also in three alcoves allotted, respectively, to city schools, rural schools, and manual training. The very complete statistics of the system were arranged in a sort of frieze running around the whole booth; the aisle partitions gave wall space for maps, drawings, etc. The striking feature of the exhibit was the alcove devoted to county high schools, a provision in which Kansas has led the West. The work of the schools, statistics showing their increase, and the text of the law for their establishment made up the contents of the alcove, with the portrait of Mr. James H. Canfield, author of the law, in a commanding position.

The exhibit of Louisiana, which comprised in a single booth the most dissimilar elements, public schools, parochial, and private schools, separate schools for the colored race, colleges and universities, was saved from confusion by the most careful organization. The feature of the public school section was the exhibit of the city of New Orleans, which compared favorably with that of northern cities, especially in the mode of displaying pupils' work and in the ingenious use of illustrative material.

Considered as a whole, the lessons of the St. Louis exhibits were for the most part repetitions of old lessons on a grander scale and in more varied forms, but in respect to one particular they made many revelations. Educational provision in rural communities for the first time assumed in this exposition the importance of a separate problem. It was presented under a variety of forms and with many suggestions as to its proper solution. State after State gave prominence to the subject in special or collective exhibits set forth in an effective manner. Minnesota presented a typical village school and a collective exhibit of rural schools; Illinois, a collective exhibit from 23 counties, including the best type of a one-room school building to be found in the State; Pennsylvania, a collective exhibit from every township in Indiana County, and Oklahoma, work from the whole body of her rural schools, with a map showing the exact location of each.

Among many evidences of efforts for improving rural schools in the interests

of agricultural communities were the unified course of study for elementary schools, as shown by North Dakota; the organization of teachers' reading circles, as in Indiana and South Dakota; the use of native material in school work, illustrated by interesting exhibits from Mississippi, Utah, and New Mexico; the general introduction of drawing and manual training, as in village schools of Iowa and Indiana, and the beginning of continuation schools for adults in rural regions, as shown by Wisconsin.

The most comprehensive and perfectly organized exhibit of the rural schools of a State was made by Indiana. It included the evolution of the consolidation county school represented by means of photographs and statistical charts. The former set in striking contrast the old conditions and the new, the latter proved that the gain in all elements of efficiency had been accompanied by a saving in public expenditure.

This running commentary on the education department of the great exposition has been limited to the exhibition features and the general trend of effort which they illustrate. Space forbids more than a reference to the pedagogic problems which it forced upon attention. Critical observers were struck with the remarkable similarity in the methods of the public schools throughout our country. But the net result in any State seemed in large measure proportioned to the resources at command. Hence the serious import of the wide divergences in this respect revealed by comparative statistics. While, however, there are many influences working toward unity of method on certain lines, the dissimilarity in others is equally marked. Manual training shows, for example, progress in three different directions. The St. Louis manual training schools follow the French method of analysis and repetition of fundamental exercises. The St. Paul Manual Training School places emphasis on construction from the beginning, while the Stout Manual Training School (Menomonie) follows the Swedish idea of strict attention to pedagogic form and adaption. Deeper still are the differences in the systems of art training, especially as seen from the international standpoint. France holds to classic styles, and England shows the subtle influence of ritualistic and heraldic emblems. Germany of all foreign countries has departed farthest from conventional models and turned to nature with splendid results. The same movement in our own country is rapidly freeing our schools from the cramp of imitation.

The exhibits also brought distinctly to view the conditions of secondary education as it is developed in different countries, and emphasized the need of some international agreement with respect to the limits of this department if nations are, at this point, to profit each by the experience of all others. Such agreement, moreover, is indispensable before the estimate of international juries can carry conviction or stimulate to large endeavors.

It were, indeed, easy to suggest a dozen lines along which select exhibits could have been made from this whole vast collection for the study of particular principles and processes in their historic and social bearings.

As an object lesson in methods of display the exhibit here considered surpassed all former efforts of the kind. In its varied collections two media of expression proved most effective, namely, photographs and statistical charts. The former not only please the eye, but they fix, in living form, subtle suggestions of mental processes to which words seldom give utterance. Statistics, on the contrary, seize and correlate the salient facts of a historic movement or of a national condition as reflected in its chief social activity. They use, moreover, a universal language by means of which a nation like Japan—newly arrived among world powers—escapes the limitation of an unknown tongue and makes intelligible to them the story of her ascent.

In regard to completeness and graphic presentation it would be difficult to choose examples from exhibits so rich in this particular form of expression. It was, however, recognized that our own country had a remarkable advantage in the high degree of uniformity that marked the statistical methods of independent States and cities. The result was justly attributed to the influence of the Bureau of Education, whose statistical survey of education in the United States formed the principal feature of its exhibit in the Government building. The reason for such location is obvious, but the regret was general that this series of charts, the impressive presentation of a nation's progress on every line of educational effort, could not have been duplicated to crown and complete our exhibit in the education palace.

ARIZONA.

HISTORY AND ORGANIZATION.

The earliest record of public funds being used for public school purposes in Arizona is found in the proceedings of the first legislative assembly, which convened at Prescott in 1864. From these it appears that appropriations were made from the Territorial treasury for the benefit of the public schools in the towns of Prescott, La Paz, and Mohave, to the extent of \$250 each, on the condition that the said towns appropriated a like sum. Five hundred dollars were appropriated to the school at Tucson at the same time, conditioned on instruction being given daily in the English language. No further mention was made of the public schools in any legislative assembly until 1868, from which it is inferred that whatever schools were in operation during the interim received their support from private sources. In 1868 the first attempt at school legislation was made, and the first public school law was enacted. This law was replaced by another in 1871, and that by still another in 1875, which remained in force until 1879. Changed conditions seemed to require further changes in the law, for in 1879, in 1881, and in 1883 other laws were passed; but these were all repealed in 1885, when the present law was enacted, which, with slight amendments, has governed the schools to the present day. The year 1885 may be fixed as the date when the school system of the Territory was founded. In that year the normal school at Tempe and the university at Tucson were established, which completes the chain from the primary school, through the grades, the normal school, and the university.

Prior to 1885 the reports and records of the public schools are incomplete. Consequently the progress of educational affairs must date from that year. The normal school at Tempe has grown in many ways. Additional buildings, apparatus of the latest improved types, and a useful library have been added as funds were available. The buildings now on the campus are the main building, training school building, and two large dormitories, all equipped with the latest designs in furniture and modern appliances. These dormitories will accommodate about 100 young ladies and gentlemen. The Northern Arizona Normal School at Flagstaff was established in 1899, and enrolled 35 pupils the first year, with but 2 teachers in charge. From time to time it was found necessary to finish off other rooms of the spacious building to accommodate the increased enrollment and the apparatus required for successful work, and now the teaching force consists of 8 teachers.

The Territorial university at Tucson is well equipped for thorough university work, having commodious buildings on the campus, and a new library building in course of construction to cost \$25,000. There are 10,000 volumes in the present library. These buildings are situated at a convenient distance from the city proper. In 1885 there were 137 schools in the Territory, with 10,219 children of school age in attendance, while the last census in 1903 gave 467 schools, with 25,951 children of school age.

ARIZONA'S EDUCATIONAL EXHIBIT.

In the great palace of education and social economy at the Louisiana Purchase Exposition the Arizona exhibit is found in close proximity to those of California, Illinois, and Pennsylvania. It is not so large and bewildering that the visitor is lost in its study, but attractive, tastefully arranged, and complete in its representation of all the grades of instruction, from juvenile hand work without the embellishment or finishing touches of the instructor to finished specimens of drawing and work in the higher branches, showing most clearly that the educational system and progress thereunder in Arizona compare favorably with those of other States and Territories represented at the exposition.

The exhibit occupies a space of 30 feet on the aisle by 18 feet in depth. The façade of colonial architecture is characterized by four large white columns with gold trimmings, the hand railing being of oxidized brass. The arrangement and display of students' work were planned by the custodian, who tried to make the most attractive exhibit possible with the small capital available. The wall space was decorated with drawings in color, photographs of schools, and work from the manual training department. There are also four large wall-displays, consisting of census tables, statistics, courses of study, etc. These tables are the work of a student in the university and have received much praise from visitors. Below these are hung two large, swinging-leaf cabinets showing views in and around the university. Extending around the booth at either end are shelves, upon which is displayed written work from the various schools of Arizona. The Tempe Normal School exhibits bound volumes of school work, one case of drawings, one of history and science, one of literature and work from the training school, and a case of photographs of buildings, classes, and class rooms, grounds, and drills. The Northern Arizona Normal School, located at Flagstaff, displays a large four-faced glass case of views of the buildings and class rooms in the school, the case being made of the beautiful white pine from the famous Coconino forest of northern Arizona. On the shelf and wall immediately back of this case is shown the excellent work from this normal school, consisting of written exercises and drawings. Occupying a space on the right hand wall are four framed maps of great merit from the Nogales Public School. The remainder of that side is given to the Phoenix Indian School. There are six large leaves of work of its students, from the kindergarten through the seventh grade. The manual training department of the same school displays one glass case of fine lace work and embroidery, three beautiful rugs, and one collection of ironwork. On the right entrance stands a hand-carved oak writing desk, made by a student of the Phoenix Indian School. A glass case on the right is filled with construction work in paper and geometrical solids, pea and toothpick work, clay modeling, eggshell work, and sewing.

The gathering of this exhibit was the work of the Territorial superintendent and others appointed by him, and represents in general the work being done in the Arizona schools.

CALIFORNIA.

BY ROBERT FURLONG, DIRECTOR.

THE EXHIBIT.

The display in the Californian section forms a collective exhibit from the leading cities and counties of the State; also an institutional exhibit from the University of California. Other State institutions are represented in photographic displays. Private schools and institutions have only a small representation.

THE UNIVERSITY OF CALIFORNIA.

A pavilion or vestibule, 40 feet square, in the northeast corner of the education building, is used exclusively for a collective display from the University of California. This is the largest space allotted to any one institutional exhibit in the palace of education.

Although somewhat distant from the university section proper, the location is almost ideal. One of the main entrances to the Palace of Education is through the vestibule. There light and ventilation are good, while its nearness to California's general school display serves to unify the State's educational exhibit. Although not obtrusive, the college colors are in evidence to gladden the hearts of U. C. students and other loyal visitors. High on the four sides of the pavilion, in large letters of gold on a field of blue, all the principal activities of the university at Berkeley are set forth in full view, that "he who runs may read." The most striking feature of this exhibit is the many beautiful photo-transparencies that give light and color to the interior walls of the pavilion. There are nearly 300 of these fine views on glass, many of them 16 by 20 inches in size, illuminated by electric lights concealed behind the framework that holds the pictures in place. It is a picture gallery of itself. Over one-third of these views are from the astronomical department of the university and are almost priceless, having been obtained at great effort and expense. Many of them are of the sun in total or partial eclipse. Some were taken in remote corners of the globe by astronomical expeditions sent out under the auspices of the Lick Observatory. Others in this group are the work of scientific observers who keep nightly vigils on Mount Hamilton, while studying the laws of the universe through the powerful instruments there at hand. A panorama of Berkeley and its environs on four glass plates, a total of 80 inches in length, gives a splendid view of the college town and its surroundings, including San Francisco Bay, with the Golden Gate in the distance. There are a dozen or more photo-transparencies presenting views of the Mark Hopkins Institute of Art. Others are of college buildings, classes at work in the laboratories and in the field, the campus, the grand old oaks, the Greek theater, works of art, museum collections, etc. Another feature of the university display is the published bulletins that have been issued from time to time by the university press. These cover a wide range. Special publications from the Lick Observatory occupy a separate showcase. Another showcase is occupied by student publications. Books written by authors who have been or who are now connected with the university, either as students or as members of the faculty, fill a good-sized library case. Another library case contains 84 volumes of translations into the Chinese language by Prof. John Fryer, of the chair of oriental languages. This unique exhibit of the work of Doctor Fryer represents a prodigious amount of labor. There are also maps, monographs, etc., prepared by university men and women.

THE CALIFORNIA GENERAL SCHOOL EXHIBIT.

Less than 50 feet distant from the university pavilion is the handsome booth of polished wood inclosing California's general school exhibit for the State. The inclosed area is in the form of a trapezium, containing 1,700 square feet. The façades on three sides are of classic design. Doric columns and fluted pilasters support a rich cornice, 14 feet above the floor. The whole structure, however, has many features that are distinctively Californian. A continuous arcade facing the broad aisles on the three exposed sides is characteristic of California's mission architecture. Two arched windows of art glass, symbolizing California's fruits and flowers, light the office at the sharp angle of the trapezium. No stain or paint mars the natural beauty of the native redwood, furnished only from California forests. The installation is unique and original, as well as artistic. Beneath nine of the graceful arches along the side façades are cabinets that open outward, while at their backs a corresponding number of cabinets open to inner aisles. Cross sections or blocks of eight cabinets each, with aisles between, fill the interior floor space. Four large arches of the front façade and one on the longer side are invitingly open to visitors.

The inner walls of the façades are beautified by framed photographic views of rare size and excellence. A view of the Lick Observatory on Mount Hamilton, 14 feet in length, has attracted the attention of many thousands of visitors. A photograph 12 feet in length is of the Leland Stanford Junior University. One of the State capitol at Sacramento is 8 feet in length; two of 6 feet each are of the State normal school building at San Jose. Santa Clara and Notre Dame colleges in Santa Clara County are shown in photographs, each over 7 feet in length. All of these grand pictures are from 2 to 3 feet each in width inside of frame. Except the view of the State capitol, all are by Andrew P. Hill, of San Jose, and came in the educational exhibit from Santa Clara County.

Art work in water colors and crayon sketches by high school pupils, alternated with exhibits in sloyd, Indian baskets, and other constructive work in wood and metal from manual training schools, all harmoniously arranged, form mosaics of the walls above the arches.

Eighty-four winged cabinets with shelved bases resting on the floor are filled with material from the elementary and secondary schools of the State. It is here in nearly 1,000 bound books and over 10,000 cabinet exhibits that the schools of California have their display. Nearly all of the cities and counties that rank well educationally are represented by exhibit material from their schools.

San Francisco has over 300 bound books, a wall exhibit of manual training, and 10 cabinets filled with pupils' work.

Los Angeles city has 7 cabinets, several bound volumes, a display of sloyd, and a fine exhibit of Indian basketwork from pupils of the elementary grades. Ten cabinets of material are from Los Angeles County, outside the city. This includes Pasadena, Pomona, Whittier, Long Beach, Compton, and other towns, also many rural schools.

The city of Oakland has 7 cabinets filled with drawings, water colors, and sketches, a wall exhibit, showcases filled with the handiwork of pupils, and 80 bound volumes. Berkeley has 3 cabinets and a number of books on shelves and in showcases. The county of Alameda, outside of the cities, presents an attractive display of pupils' work from the town, village, and rural schools, also an exhibit of school administration in the county, a cabinet of the wild flowers of the county, and a cabinet of drawings from the Haywards schools. This exhibit has also a large number of photographs of school build-

ings in city, town, and country, together with a relief map of Alameda County. Twenty-five substantially bound books of miscellaneous school work accompany this exhibit.

Fresno County makes its display in 6 cabinets, 4 of which are filled with work from Fresno city schools. The city also displays 2 wall trays of high school manual training and some attractive water colors and sketches by high school students. Twenty-seven bulky volumes contain the written work of the Fresno exhibit.

Sacramento County is represented with 5 cabinets of material and a number of bound books. One of the cabinets is from the county outside the city, and contains exhibits from rural and town schools. A large album contains views of the school-houses throughout the county. The artistic design on the glass front of the Sacramento cabinets attracts much attention aside from the merits of exhibits within.

The Stockton exhibit, which fills 6 cabinets, occupies a prominent place in the front section, where it is seldom without visitors. It shows the work of a year in every class of every grade in the Stockton city schools. Material, which was taken daily from class exercises, is on manila paper as it came from the class room, uncorrected. There are duplicate sets of books, by which arrangement the work is presented both by subjects and by grades. A color scheme in the binding enables the visitor to quickly find the particular subject and book that he may wish to inspect. A typewritten outline of method used by teacher, the requirements of the course of study, and the daily programme showing time allotment for subject, all precede pupils' work, filling several pages at the beginning of each book. There are some 200 neatly bound books in the Stockton display. Some original lines of study are shown in "Books of industries," "Books of excursions," and in albums of fine photographic views of the industrial activities in and around Stockton. There are also "Books of methods," "Books of programs," a monograph on "The interior decorations of schools," and a series of books outlining a course in physical training, all by teachers in the Stockton department.

Sonoma County illustrates her course of study in a number of bound books and in 3 cabinets filled with drawings, maps, and photographs, chiefly from the primary and grammar schools of the county. There is also a showcase of native woods and rocks collected by pupils, a statistical table containing data of growth and financial support of schools in the county, and two large photographs of high school buildings.

Kern County has four cabinets, a manual training exhibit in wood and iron from the county high school, and thirty neatly bound volumes of pupils' work. The binding in this exhibit was done by pupils in the manual-training department of the Kern County High School. It is perhaps the best illustration of practical skill in handiwork of any displayed in the California exhibit.

Under the folds of a beautiful flag suspended from the inside cornice are three cabinets containing the Ventura County exhibit. Partly concealed by the Stars and Stripes is a lithographic map of Ventura County, showing the location of school districts.

Monterey County presents a fine collection of sea shells and other marine fossils from the Pacific. The collection was made by the pupils of Bay district, Monterey County, where such material is used for nature study and language work. This display of Pacific coast shells is much admired by people from the Mississippi Valley States, who are not familiar with marine products. Monterey County has also a cabinet of illustrative work from her schools.

Marin County has one cabinet, a number of large books of material from rural and town schools, and some drawings and apparatus made by pupils of

the San Rafael High School. This display is chiefly representative of the primary and grammar schools of the county, the material having been selected from typical schools and classes.

One cabinet and some seventy bound books comprise an exhibit from Santa Cruz County. The display is of both elementary and secondary education. There are many beautiful photographs of the redwood forests and of scenes on the ocean beach, used in connection with both language and geographical work.

Two cabinets were secured from Placer County for a display of its schools. The material from the Auburn schools was lost in transit. One cabinet is filled by the county schools, including the Placer County High School.

Two schools only are represented in the exhibit from San Bernardino County. The Lugonia and the Kingsbury schools, of Redlands, have each an exhibit both in manual training and in regular lines of everyday activities in their classes.

El Dorado, Orange, and Santa Barbara counties have each sent some work to illustrate education in their respective counties.

There is a private exhibit of sea mosses and marine algæ, scientifically classified and well mounted, filling one wall cabinet, from San Diego County.

The Hitchcock Military School, at San Rafael, has an exhibit in woodwork representing the course of study in that branch of manual training and displaying the skill of young students in handiwork.

The State library, at Sacramento, has three of its traveling libraries, each containing fifty books, on exhibition. It also has a handsome wall cabinet of large photographic views of the leading public libraries of the State, accompanied by a monograph on California's public libraries. Several thousand copies of this monograph are for distribution.

There is an exhibit from the Von Meyerink School of Music, in San Francisco, an exhibit in school architecture showing many fine school buildings of the State, also a model of a school building suitable for California climate, by a firm of architects of San Francisco, and one cabinet of photographs showing manual-training plant of the Wilmerding School, the California School of Mechanical Arts, the Polytechnic High School of San Francisco, and the Anna Blake School for Manual Training, at Santa Barbara. There is an exhibit in wall pictures of the Throop Polytechnic Institute, at Pasadena; also of the State Polytechnic School, at San Luis Obispo.

California's five State normal schools have a collective exhibit in photography, filling one cabinet and making an attractive wall display. The State institution for the deaf and the blind has one cabinet, some bound books, and some constructive work made by students in the institution.

Administration of the school system of California is displayed in a carefully arranged exhibit from the office of the superintendent of public instruction. It consists of copies of school laws, reports of State superintendent, school registers, and a large book of forms containing blanks of every description used in the administration of schools. A full set of the State school text-books accompanies this exhibit.

Four monographs on education were prepared expressly for the California educational exhibit. A thousand copies of each will be distributed during the time of the exposition. Other literature bearing upon education in California is being gratuitously distributed. Some 5,000 copies of an illustrated report from the Golden Gate Kindergarten Association, of San Francisco, are for free distribution. Ten thousand copies of "California," a 200-page book setting forth the activities of the people of the Golden State, including educational activity, are being given away in the different exhibition buildings.

Statistical data relating to the public educational system and its means of

support are found in the biennial report of superintendent of public instruction, many copies of which have been distributed during the time of the exposition.

It has been the aim of those having the exhibit in charge to present a fair and full display of the work of California's schools. While every phase of education may not appear in it, yet the exhibit is sufficiently comprehensive to include all of the State's leading educational activities. Some things that are distinctively Californian have been emphasized in the material presented for display. The industries of the people, the products of the soil, the fruits and flowers of the State, together with the scenic grandeur of its mountains and forests, have all been used as subject-matter for composition and drawing in the elementary grades. It is worthy of note that some of the exhibits display work showing a close relation between the class room and the industrial activities in the neighborhood. At least one large exhibit presents evidence of a successful effort to correlate the work of the school with the work of life. Classes of pupils have been taken to the factories, the mills and the workshops of their city, also the dairies, the orchards, and the vineyards of the surrounding country to study the industries and the products of their locality. Written descriptions, illustrated with drawings and photographs of the things noted, preserve a record of such visits. A like tendency to bring the work of the schools nearer to the people is observable in some exhibits of secondary education, also in several of the courses outlined for college work at the university. This should be especially gratifying to those who have heretofore claimed that the trend of education is in the opposite direction.

COLORADO.

BY HELEN L. GRENFELL, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, AND
JAMES B. RAGAN, DIRECTOR OF EXHIBIT.

ORGANIZATION.

The school system of Colorado was formally established by act of the legislature in 1861. Comprehensive enactments were made, and the management of school affairs was placed in the hands of a Territorial superintendent, county superintendents, and district boards. County and district taxation for the support of the schools was established, and even in these early days interest and pride in educational conditions were manifest.

In 1876 Colorado was made a State. The school system was established by the constitution, and the statutes gave it equal consideration with other matters of weight and importance. A superintendent of public instruction was placed at the head of the educational system, and was to be elected at the same time as the governor and other State officials, for a term of two years and with a salary of \$3,000. This official provides the questions for county examinations of teachers, held three times a year, edits the school law, gives decisions upon points of school law, and supervises the work of the county superintendents of the whole State. He also distributes the school income fund twice a year to the various counties of the State. He is president of the State board of education and the State board of examiners, and is a member of the State land board.

The State school fund is derived from the sale of lands bestowed by act of Congress upon the schools of the State. These amounted originally to some 3,500,000 acres, and are mineral, grazing, and agricultural in character. The

income from the rentals of these lands and from the interest of the school fund forms the school income fund, which is semiannually distributed as stated above.

The other school revenues are derived through a system of local taxation (a general county tax fixed by each board of county commissioners, the minimum allowed being 2 mills, and a special tax levied by the electors and varying in amount in the districts of the different classes) and from fines and forfeitures fixed by law.

Provision was made in the constitution for the establishment of a State university, and the institution was opened in 1877. It is located in the town of Boulder and has become far-reaching in its influence. Its first president was Dr. Joseph A. Sewall, the position being filled for the past twelve years by Dr. James H. Baker. The university is supported by a two-fifths mill State levy.

A school of mines was established at Golden in Territorial days and is a flourishing institution at the present time. Its students receive practical instruction in all lines of importance in mining work, such as engineering, assaying, etc., and its graduates may be found in the South African and South American gold fields, Europe, Australia, and Alaska, as well as in important positions throughout our own States.

The State Agricultural College was established at Fort Collins in 1879, and is doing excellent work in solving the agricultural problems peculiar to an arid region.

The State normal school was established at Greeley in 1890, and yearly sends out a large class of well-equipped teachers, but as yet the supply of teachers obtained from high school and college graduates and the normal school is insufficient to meet the demand of the State, which circumstance has attracted instructors from every part of the Union. In 1877 a law was enacted providing for the establishment and support of teachers' normal institutes, the various counties of the State being grouped for the purpose into thirteen institute districts. The county superintendents serve as members of the executive committees managing the institutes. The instruction in these institutes is given by educational people of high standing and has been productive of much good, better equipping teachers for the work of the smaller schools.

Institutions of importance are the State school for the deaf and blind and the State industrial schools for boys and girls, the work of which is on a thoroughly practical basis and is accomplishing most helpful results for the classes of children concerned.

A law providing for the establishment of free kindergartens in any school district was passed in 1893, and provides for the training of children from 3 to 6 years old, the latter being the age of eligibility to enter the regular public school work.

The common school work provides for eight years' elementary and four years' high school work. The law demands that the elementary schools must be maintained for at least sixteen weeks in each year to be entitled to a share of the State school income fund.

Local school affairs are managed by boards of directors of from three to five members, who are elected by vote of the people, the terms being from three to five years. These boards have full power to employ and discharge teachers, fix the course of study for the schools, and make rules and regulations governing them. In districts having over 1,000 children of school age the boards have the power to examine and certificate teachers, and also to fix the amount of the special district tax before mentioned.

Women in Colorado have always had the right to vote for members of school boards and to be members. Since the granting of full political rights to women, through act of the legislature in 1893, at least one-half of the county superintend-

ents have been women, and women have continuously filled the office of State superintendent of public instruction since that time.

It is held to be largely due to the work of the women that the excellent compulsory laws now existing have been passed. These provide that every child between the ages of 8 and 16 shall be sent to a public, private, or parochial school during the entire school year, save that a child over 14 who shall have completed the eighth grade, or may be eligible to enter a high school, or whose help is necessary for its own or its parents' support, if in the latter case such child is being sufficiently instructed at home by a person qualified, shall not be required to attend school. The law also provides for the punishment of truant children by commitment to the industrial school or some other training school. Provision is made for the appointment of truant officers, whose duty it is to see that the law is thoroughly enforced in their district. Children under the age of 14 can not be employed in any factory or other place of business during the school term. All children over 14 and under 16 years of age who can not read and write English are required to attend school half the time or have private instruction from some person.

Free text-books may be provided by any district school board upon a majority vote of the electors of the district for the pupils in the schools. There is no State system of text-books, each school district having the privilege of using whatever books may be decided upon by its board of directors, the law requiring that changes in text-books be not made oftener than once in four years.

The schools of the State are passing more and more into the hands of women, the work of the men being practically restricted to the high school grades and principalships. The average wages per month in graded schools are, for men, \$86.65, and for women, \$58.58; in rural schools, for men, \$52.27, and for women, \$45.15.

The average expenditure per child of school age for school purposes in the year 1904, based upon the total enrollment, was \$38.76, which includes only expenditures for elementary and high school work. The total expenditure per capita of the population for education in 1904 was \$6.41. The growth of the State during its twenty-eight years of existence is plainly shown by the following statistics:

Children of school age (6 to 21) in Colorado in—

1877-----	21, 612
1904-----	179, 919

Children enrolled in public schools—

1877-----	14, 085
1904-----	134, 260

Amount expended for schools—

1877-----	\$215, 225
1904-----	\$4, 103, 639

THE COLORADO EXHIBIT.

In planning and preparing the exhibit of Colorado for the Louisiana Purchase Exposition the following purposes were kept in mind:

First. The schools of the State must be directly benefited in the preparation of the exhibit. In order to accomplish this end it was urged that all work be prepared during the preceding school year and with the pupils' knowledge that some of it would be sent to the fair; also, that the exhibit would be displayed at the school, or at the superintendent's office, so that parents and others could see what the schools were doing and surmise what they would be able to do, under more favorable conditions.

This plan was pursued in many instances, and it proved to be a source of

much information to the parents as well as the general public and brought both into closer sympathy with the schools and their management.

It was also understood that all exhibits of the State would be assembled at Denver prior to being taken to St. Louis, thus giving the added opportunity to see what is being done in other parts of the State. Thousands visited the collective exhibit. All seemed surprised, and many wondered if the children could do it again.

Second. The course of study of each school should be illustrated as fully as possible by the actual work of the pupils in that school, thus benefiting the entire State, as well as the school, by giving opportunity for comparison, if not furnishing new ideas to students of education at the exposition.

Third. The complete system of public education should be shown as an organic whole—from the kindergarten through the elementary, secondary, and higher schools, including the juvenile court and detention house, the industrial school for boys, and the school for girls, the State home for dependent children, and the school for the deaf and blind, the State university, the State normal, the State agricultural college, and the State school of mines.

Fourth. There should be demonstrated what can be accomplished in manual training and domestic science in a period of eight or ten years, working one and one-half hours per week in the elementary schools, and three or four times as much in the secondary manual schools. Also the relative importance of these subjects in the courses of study of the various schools in the State, and their influence, if possible, on the remaining subjects taught.

Fifth. To show that drawing and art can be correlated with manual training from the kindergarten through the elementary and secondary courses of study, and that they should be so correlated.

Sixth. To show the evolution of the schools of Colorado during the past twenty-eight years, relatively and absolutely, by means of six models of school-houses, consisting of the "dugout," sod house, log house, modern rural frame house, modern city graded school, and high school; and by statistical tables showing the growth of interest in education, and the State's position compared with the other States, with reference to expenditures per capita for school purposes.

The substance of the foregoing and many general and special suggestions were embodied in circular form and distributed to superintendents, principals, teachers, and school authorities throughout the State.

In the main only general suggestions were made for the preparation of material to illustrate courses of study. It was not desired to secure uniformity in the work from all the schools of the State, but to give as much freedom as possible to teachers and supervisors in preparing their exhibits, provided that the preparation be made with fidelity to their course of study. Special directions were given with reference to certain kinds of drawings and their mounting; to the form of the manuscript work, the original draft with its indicated corrections in red ink to be preserved and bound with the pupil's corrected copy, thus showing a teaching process; the different steps in the production of certain finished pieces in manual training were to be illustrated, and for the same purpose.

Special visits were made to superintendents and supervisors, to superintendents' and teachers' associations, and to State institutions, in order to gain and disseminate ideas that might prove helpful in preparing the exhibits.

All parts of the State's exhibit were prepared, collected, arranged, and installed in accordance with the purposes and general plan above mentioned.

The various kinds of work from each system of schools were installed as a unit, showing the grades in progression rather than by subjects.

Some of the most striking exhibits—the "Evolution of the schoolhouse," the

tissue-paper art windows, and the manual training from various schools were placed in the back part of the booth in such position that no one could fail to see them from the aisle outside.

The walls and partitions were covered with manual work, maps, charts, photographs, and more than sixty educational leaf cabinets filled with drawings, photographs, and paintings. Nearly two hundred bound volumes of manuscript were displayed on the shelves of the cabinet bases.

It was the intention to arrange the exhibits in a simple, orderly, tangible way, so as to attract and hold the attention of the visitor, and at the same time to assist him in following up the illustration of any course of study.

Some of the lessons of the exhibit may be summarized as follows:

First. In order to be of most value an exhibit must consist largely of the regular school work rather than special work or show work. It should be collected throughout the school year, and ought to show a teaching process wherever possible.

Second. Manual training, correlated with drawing and art, is not of importance mainly on its own account, but in its bearing and influence, directly or indirectly, on every other subject studied, and through these on the character of the child. The inference might here be made that if manual training one and one-half hours per week is good, three or four hours per week would be better.

Third. If the general opinion of visitors be taken as the expression of good judgment, an exhibit should be simple enough to be readily understood, yet complex enough to be educative in its general effect.

Fourth. A lesson to the school men of Colorado is that while her schools are doing some things as well as, and some things better than, they are done in other parts of the world, still they are doing other things not so well, and ample room for improvement may be found in many parts of the State.

CONNECTICUT.

BY C. D. HINE, SECRETARY OF STATE BOARD OF EDUCATION.

THE EXHIBIT.

The Connecticut educational exhibit was arranged by towns and cities, except in the portion displayed on the walls.

On the south wall are two panels of drawings from the Arsenal, Northwest, Northeast, Second North, Brown, and Washington Street schools of Hartford; charts from New Haven, showing drawing and water colors; charts of water-color work from New London; charcoal drawings from Middletown. On the north wall are drawings from Middletown; picture of the New Haven High School; pottery and basketry, original designs on cloth, leather, and wood from the New Haven schools; woodwork from the Stamford schools. On the east wall are three panels of raffia work and three panels of woodwork from the South School, Hartford; three panels of machine work, woodwork, forging, Venetian ironwork, and pottery work from the pupils of the Boardman Manual Training School, New Haven; four panels of work from the manual training department of the Hartford High School; two panels from the West Middle School, Hartford, showing specimens of the pupils' work in drawing and original design.

The Middletown exhibit is shown in cabinets 1 and 2. It consists of papers and illustrated booklets, showing correlation of nature study, language, and drawing, and history and geography with language and drawing. In the cases below are bound volumes of pupils' work in history, geography, nature study, Latin, physics, essays, drawing; and from the high school, work in French, German, Latin, physics, chemistry, botany, zoology, political economy, Greek history, English.

The New Haven exhibit is in cabinets 3 to 15, 53 to 56, inclusive. In these cabinets are exhibited specimens of pupils' work in drawing, kindergarten, nature study, science, English composition and letter writing, technical grammar, local history, United States history, penmanship, sewing, handicraft work, reading, arithmetic, suggestions for busy work. On the shelves are shown bound volumes of pupils' work in the subjects enumerated above, and also of kindergarten work. The high school work is shown in cabinets 12 to 15 and also on the panels above the cases. In the cabinets are shown the blanks used in the high school administration, outline of the courses of study, showing the number of periods devoted to each study, work from the business department, free-hand drawings, mechanical drawings, samples of work in sewing, domestic science, botany. Particular attention is called to the photographs of the pieces in wood carving, pottery, Venetian ironwork, shop work, and sewing actually completed by the class graduating from the Boardman Manual Training School in June, 1903. On the shelves are bound volumes of high school pupils' work in drawing, domestic science, geography.

The Hartford exhibit is shown in cabinets 16 to 26 and 32. The high school exhibit is in cabinets 16 to 18, and shows pupils' work in constructive drawing, free-hand drawing, work from the commercial department. In the cases are bound volumes of constructive drawing, blueprints, business forms, and specimens of the work of the pupils in the manual-training department. Other specimens from the manual-training departments are shown on panels above the cabinets. The work from the graded schools is shown in cabinets 19 to 26 and 32, and on the wall space above the cabinets. On the cabinet leaves are shown selected specimens of the pupils' work in geography, arithmetic, technical grammar, drawing, history, language and literature, nature work and science, algebra, geometry, penmanship, both work of the teachers and of the pupils, sewing and cooking outlines. There are on the shelves bound volumes of pupils' work in all of the subjects mentioned, and also an exhibit of kindergarten work, raffia, Venetian ironwork, basketry work, sewing, and a collection of twigs.

The New London schools exhibit, in cabinet 27, work in history, geography, arithmetic, and grammar. The bound volumes include the subjects mentioned and penmanship and portfolios of drawings.

The city of Norwich is represented by work from central district schools and from the schools in the West Chelsea district. The central district shows, in cabinet 28, work from the pupils in the graded schools. There are selected papers in language, literature, history, geography, and nature study. There are bound volumes of work in arithmetic, language, history, geography, literature, spelling, nature work, and in the case some mounted butterflies. The West Chelsea district, in cabinet 37, has selected work in arithmetic, history, geography, language, grammar, literature, and drawing, and bound volumes in the same subjects. In the case is an industrial chart on flax, prepared for school use.

The Stamford schools use cabinets 29 and 30 for showing commercial work from the high school and from the graded schools pupils' work in language, reading, drawing, kindergarten work, and cooking. There are bound volumes of

pupils' work in drawing, history, geography, miscellaneous work, and portfolios of forms in high school commercial department, drawing, and sewing.

In cabinet 31 Bristol shows selected papers in color work, drawing, designs for book covers, sewing, kindergarten work, and on the shelves portfolios of drawing and sewing, bound volumes of pupils' work in arithmetic, physiology, history, geography, language, and drawing.

Work from the rural schools in North Canaan and Prospect is shown in cabinet 33. The work from North Canaan is in English and mathematics, from Prospect in language and in science. There are also bound volumes in English, geometry, and language from these schools. In this cabinet are drawings from Groton, Meriden, and Greenwich, and bound volumes of pupils' work in drawing, writing, arithmetic, language, and music from Westbrook; in grammar, arithmetic, and spelling from Southington. One volume on this cabinet contains a stenographic report of the entire work of a half day in an ungraded school in Southington.

The Waterbury exhibit is in cabinets 34, 35, 36. A series of photographs shows the changes that have been made in school buildings in that city during the last ten years. There are specimens of free-hand drawing from the pupils of the high and evening schools; work of the pupils of the graded schools in civics, primary language, and local history. On the shelves below are bound volumes of pupils' work in language and history and civics.

The Connecticut State normal schools' exhibit in cabinets 38 to 41. In cabinets 38 and 39 is shown the work of the children in the model schools of the New Britain Normal School in drawing, nature study, science, stories from Connecticut history, translation from French (Grade VIII); the work of the normal school students in the geography of New Britain and vicinity. In the case is shown geological maps of the city and vicinity, prepared by the students. Booklets containing stories from Connecticut history and drawings by the model school children are on the shelves. The exhibit in cabinet 40 was prepared at the Willimantic State Normal School. The organization of the school, course of study, outline of plan for primary arithmetic, primary geography, letter writing, normal school extension, general plan, and typical science lessons are shown on the cabinet leaves. On the shelves are bound volumes of "Outline of work done in practice school in primary arithmetic" and "General plan of teaching letter writing." The New Haven Normal School shows, in cabinet 41, a "Plan of common school education followed in the State Normal School, New Haven." In the case is a sample of a science cabinet prepared at the school, to be loaned to the teachers in the public schools of the State. A noteworthy feature of this exhibit is the list of books actually read in the different grades of the model schools connected with this school. On the shelves of cabinet 42 are two sets of Connecticut town reports and a set of the reports of the Connecticut State board of education and samples of library and school documents.

The exhibit of the New Britain city schools is shown in cabinets 43 and 44. It consists of papers showing the work of the high school in stenography and typewriting, and graded school work in penmanship, language, spelling, arithmetic, algebra, drawing, and kindergarten work. On the shelves are bound volumes of pupils' work in language, spelling, arithmetic, algebra, portfolios of drawings, photographs, and kindergarten work.

The exhibit of the Deep River schools (town of Saybrook) is arranged in cabinet 45. It consists of papers selected from pupils' work in algebra, arithmetic, number, papers showing the correlation of drawing with language, geography, history, and literature. There are bound volumes of pupils' work in algebra, arithmetic, and language.

In cabinet 46 the Connecticut public library committee show the library privileges open to the people of the State. There is a map showing the distribution of public libraries, charts showing organization and statistics, photographs of the buildings. On the shelves are samples of library and school documents, a library scrapbook, a sample portfolio of Audubon bird charts, sample portfolio of pictures loaned by the Society of Colonial Dames. In special cases in front are samples of libraries loaned to the library committee by the Audubon Society and the Society of Colonial Dames. These portfolios and libraries are loaned by the committee to the public schools of the State.

The Bridgeport exhibit is in cabinets 47 to 51. In cabinet 47 the Bridgeport City Normal School shows charts prepared by the normal students "during the discussion and application of the principle concerning the relation of the concrete to the abstract in instruction." In cabinet 50 the city normal school shows methods in geography and the work of the practice and regular departments. In the other cabinets are shown specimens from the art work of the public schools and pupils' work in arithmetic, language, composition, history; outlines of the methods of teaching music in the schools; a series of photographs illustrating the methods of physical training. There are bound volumes of pupils' work in drawing, composition, and arithmetic.

In cabinet 52 Ansonia shows the city school administration, specimens of the work of the children showing the correlation of drawing and language, pupils' work in number and drawing, and work from the high school. There are bound volumes of pupils' work in language, geography, history, and Latin.

ILLINOIS.

BY ALFRED BAYLISS, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

ORGANIZATION.

The public school system of Illinois is based upon the statutory provision that "each Congressional township is hereby established a township for school purposes." The law provides that three trustees shall be elected in each township, to hold office for three years, one being elected each year. The trustees appoint a township treasurer, who is under bond, and whose duty it is to receive, hold, and pay out all school moneys, securities, papers, and effects belonging to the township or the school district. The trustees are authorized to "lay off the township into one or more school districts, to suit the wish or convenience of a majority of the inhabitants of the township." This provision has led to the establishment of 11,751 districts, 10,677 of them so small as to require the services of but a single teacher.

In each school district having a population less than 1,000 there is a board of three directors, and in each district having more than 1,000 and not over 100,000 inhabitants there is elected a board of education consisting of a president and six members and "three additional members for every additional 10,000 inhabitants." The term of office of directors and members of boards of education is three years, one-third of the membership being elected annually. The presidents of boards of education are elected as such by the voters annually, and have no vote except in case of a tie. In cities having a population exceed-

ing 100,000 inhabitants the board of education consists of 21 members appointed by the mayor, by and with the advice of the common council, 7 each year, for the term of three years. Boards of education and of directors are authorized to levy taxes to the amount of $2\frac{1}{2}$ per cent upon the assessed valuation of all the taxable property in the districts, annually, for maintenance, and, when authorized so to do by the electors of the districts, a like amount for building purposes. When authorized by a vote of the electors, boards may also issue bonds for indebtedness to the amount not exceeding 5 per cent of the total valuation. These boards are authorized, and thus empowered, to establish and maintain free schools, employ teachers, adopt text-books for a period not less than four years, and make all necessary rules for the government of the schools, which are free to all residents of the respective districts between the ages of 6 and 21 years.

Two or more adjoining townships, or parts of townships, as well as any single Congressional township, may, in a manner provided by law, establish and maintain a "township high school;" such schools, of which there are as yet 33, being governed by a township board of education of 5 members, with the general powers of school directors.

In each county there is a county superintendent of schools, elected by the voters of the whole county quadrennially and paid by the State. It is the duty of the county superintendent to act as the official adviser of the school officers in his county, to examine and certificate teachers, to visit and supervise the schools. He is required by law "to spend at least half the time given to his office, and more, if practicable, in visiting ungraded (1 teacher) schools." No scholastic qualifications are prescribed for the county superintendent.

There is a State superintendent of public instruction, elected quadrennially by the voters of the whole State. He is charged with a general supervision of all the common schools of the State; is the legal adviser of all school officers; must give his opinion upon any question arising under the school law, when requested, and hear and determine controversies coming to him by appeal from the county superintendents, and report the general condition of the schools to the governor biennially.

There are five State normal schools, established and maintained by the State, in which tuition is free to all persons preparing to become teachers, subject to an agreement to teach in the schools of Illinois for a specified time, unless employment can not be found. These schools are governed by boards of trustees appointed by the governor, the State superintendent being *ex officio* a member of each board.

THE ILLINOIS EXHIBIT.

The school exhibit made by the State of Illinois represented every grade of school established under the foregoing provisions of law, except in school districts having a population of over 100,000 inhabitants. (At present the school district of the city of Chicago is alone in that class. The exhibit from that city was a unit by itself and was maintained as such.) The State commission provided the booth, received the material, and authorized the State superintendent of public instruction to install it. Except a very small allowance to each normal school, all expenses connected with the preparation of material and transporting it to and from the exposition were borne by the districts. It is, therefore, not possible accurately to estimate the cost of the exhibit.

The first request to districts to participate in the exhibit was made as late as November 1, 1903. At that time all schools under boards of education, except in cities of over 100,000 inhabitants, and all county superintendents were invited to send material, subject to the following classification and suggestions:

CLASSIFICATION OF SCHOOLS.

GROUP I.—*Elementary education.*

Class 1. Country schools.

Class 2. Semigraded schools.

Class 3. Graded schools.

GROUP II.—*Secondary education.*

Class 4. High schools.

Class 5. Normal schools.

Under this classification it is desired to exhibit:

1. Legislation, organization, general statistics.
2. Buildings—photographs, plans, models.
3. Administrative methods.
4. Results obtained by methods of instruction.

MATERIAL OF EXHIBIT.

CLASS I.—*Country schools.*

1. The design of the best one-room schoolhouse in the county, to include floor plans and method of heating and ventilating.
2. Photographs of ten of the best one-room school buildings in the county, preferably with pupils and teachers in front of the buildings.
3. Photographs of every school building in ten or more counties, as above.
4. Photographs of groups and classes of pupils at work.
5. Photographs of school libraries, museums, natural history collections, etc.
6. Photographs of school gardens.
7. Manual training work of all kinds.
8. Collections of written work, honestly prepared and intelligently labeled, bound in volumes arranged by grades, so as to clearly and faithfully illustrate the solid and indispensable work of the school.
9. Free-hand drawing, color work, illustrations, map drawing, etc.
10. A bound collection of circulars, programmes of teachers' meetings, school papers, and other printed matter used by the county superintendents in administrative work.

CLASS II.—*Semigraded schools.*

Material for exhibits from schools of this class may be chosen from the items enumerated for country schools or graded schools, in the discretion of teachers, acting under the advice of the county superintendents. All schools in buildings with fewer than eight rooms may be counted in this class.

CLASS III.—*Graded schools.*

1. In this class should be placed schools in buildings with eight or more rooms for grades below the high school. For work done in this class the unit is the city, and material may be prepared under the direction of the city superintendent or corresponding officer. To the itemized suggestion of material under Class I may be added apparatus, appliances, models, and materials used in teaching each of the eight grades; lists of supplementary and collateral reading, reference books, maps, charts, magazines, and newspapers in use; printed courses of study, manuals of directions, blanks, reports, records, etc.; programmes, rules and regulations, annual reports, and other printed matter.

2. Photographs of all school buildings in the city, showing pupils and teachers at work, as well as exteriors and playgrounds.

3. Statistical charts, diagrams, and tables showing graphically the important facts in regard to the population, the number and kind of schools, number of teachers, number of pupils, cost of instruction, etc.

CLASS IV.—*High schools.*

1. A photograph of each and every building in Illinois used exclusively for high school purposes is earnestly desired.
2. Photographs of physical, chemical, and biological laboratories and the assembly rooms are especially desired.
3. Photographs of manual training and household arts departments, showing equipment and pupils at work.
4. The school grounds, shown by topographical maps and photographs.
5. School gymnasiums, games, and outdoor sports.
6. Printed lists of text-books, libraries, and collateral reading lists.
7. Courses of study.
8. A graphic representation of the history of the school, showing number of graduates, their present occupations, the per cent of pupils who have gone to college, higher technical, or professional schools, and other data tending to illustrate the plans, methods, and ideals of the school.
9. Choice specimens of pupils' work in physics, chemistry, biology, and in manual training.
10. Bound volumes of the written work of the pupils, intelligently labeled to show conditions under which the work was done.

CLASS V.—*Normal schools.*

1. Topographical map of grounds.
2. Photographs of grounds and buildings.
3. Photographs of interior views of libraries, class rooms, laboratories, etc.
4. Publications of the school or of members of the faculty.
5. Theses of students, graduates, or undergraduates.
6. Special methods of instruction and pieces of apparatus invented at or peculiar to an institution.
7. The course of study, equipment, maintenance, history, and purposes of the school shown by charts, catalogues, yearbooks, etc.
8. A representative collection of work done by pupils in the practice school.
9. A representative collection of students' written work, with especial reference to those forms peculiar to normal schools, as observation notes, lesson plans, and the like.

10. A pamphlet for judicious free distribution, to include paragraphs explanatory of the objective exhibit as well as a retrospective view of the school.

The exhibit thus assembled was necessarily more or less unbalanced. The late date of the initiatory steps and the somewhat inadequate allowance for necessary expenses also operated to some extent as handicaps. Evidences that it had been collected and arranged on short notice were not wanting. It had, however, the merit of fidelity to actual and, perhaps, average conditions, and was more than ample in quantity. The exhibit included 3,500 photographs, 1,200 volumes of written work, 3,000 pieces of hand work, 7,000 drawings, an excellent model of a school building recently erected for the use of a "consolidated" country school, a model of an unusually good type of one-room schools, and a topographical map and model of the grounds and buildings of the Carbondale Normal School—the work of students of that institution.

No features of this exhibit stood out in very bold relief as more excellent than others. Its characteristic was the completeness with which it represented, as far as it is possible to do so objectively, present conditions in the common schools of a wealthy State in which the school system is so organized as to leave almost everything to local initiative. From this point of view its uniformity was remarkable. Sixty-eight city and village school districts, 11 township high schools, 29 counties (country schools), and 5 normal schools were represented.

There were variations in quality and quantity, but no decided premiership in any group. It is believed, too, that it would be quite possible to assemble, without notice, from the current school work in Illinois an equivalent or even better exhibit without in any way varying the routine of the schools for that purpose—given the authority to select and take the material wherever found. Had more time, money, and forethought been expended upon this exhibit it might, perhaps, have been more uniformly excellent, and certainly more artistically installed, but at the risk of making it more impressive to the casual observer and at the expense of fidelity to actual conditions and value to the student of things as they are. Upon this last consideration must be based whatever claim of excellence is made for the exhibit as a whole.

INDIANA.

BY W. A. MILLIS, DIRECTOR.

ORGANIZATION.

In the State of Indiana elementary education is almost exclusively a function of the State. In rural communities and in most towns the public school is the only school known to the people. In the cities desultory systems of parochial schools are maintained, and in the larger cities a small number of poorly attended private schools exist. The chief provision for secondary education is in the more than 1,000 public high schools. These are supplemented by 26 academies, seminaries, and preparatory schools under private or ecclesiastical control. The facilities for higher education comprise two State universities, one organized in the direction of the liberal arts and the professions, the other in the direction of technology and engineering, and 20 other colleges and universities. The relative extent of public education as compared with education under all other control is shown in the table of enrollments below. The numbers are approximate:

Department.	Enrolled in public or State schools.	Enrolled in all other schools.
Elementary	556,000	5,000
Secondary	33,650	1,800
Higher education	2,893	3,703
Normal schools	1,791	5,242

ADMINISTRATION.

The spirit which pervades the organization and administration of the public school system of Indiana is reflected in the purpose to provide "open paths from every corner of the State through the schools to the highest and best things which men can achieve."

The public school system provides for three circles or spheres of administration: (a) The State, (b) the county, and (c) the township, town, or city. In each sphere the administrative bureau comprises an executive officer and a board of education, which in some respects sustains an advisory relation to the

executive and in other respects a superior relation. The State bureau of education is composed of the State board of education and the State superintendent of public instruction. The State board of education is composed of eleven members, eight of whom are members ex officio and three are appointed by the governor of the State. The ex officio members are the presidents of the two State universities, the president of the State normal school, the superintendents of public schools of the three largest cities of the State, the governor, and the State superintendent of public instruction. The three members appointed by the governor must be actively engaged in educational work, and at least one must be a county superintendent of schools. The State board of education is charged with general responsibility for the certification of teachers. It prepares all questions used and issues regulations governing the conduct of examinations. It is thus charged with the control of teaching standards. The State board selects and adopts text-books used in the elementary schools throughout the State. It inspects public high schools and the State normal school, prepares courses of study for the high schools, and establishes a uniform requirement for such schools as wish to be accredited as preparing for admission to the colleges and universities. It also supervises the University of Indiana to the extent of appointing five of the eight trustees of the institution. The State superintendent of public instruction is elected biennially by direct vote of the people. He is charged with the supervision of all school funds and revenues, the disbursement of school revenues, the preparation of courses of study for the elementary schools, the general supervision of educational conditions throughout the State, the promotion of educational progress, and the duty of advising the general assembly of needed legislation. He is ex officio president of the State board of education and a member of the board of trustees of the State normal school.

The county bureau is composed of the county superintendent of schools and the county board of education. This board is composed of an ex officio membership, the trustees of the several townships into which the county is divided. The chief function of this body is the selection of the county superintendent of schools and the truant officer. The county superintendent holds his office for a term of four years, conducts examinations and issues licenses to teachers, conducts institutes and other teachers' meetings, supervises the location of schoolhouses, advises in the selection of teachers, inspects schools and directs their management and the instruction.

Rural schools are under the management of the township trustee, who selects and employs teachers, provides houses and equipment, and holds or causes to be held township teachers' institutes. He must submit all financial matters to an advisory board for approval. The schools of incorporated towns and cities are under the control of a board of school trustees, consisting of three members appointed by the common council. This board is charged with all details of direct school management, but may and in all cases does employ a superintendent, to whom is delegated all details of instruction and government, and in many cases all executive functions, the board retaining a general supervisory function. In the city of Indianapolis this division of function is required by law.

The school system is supplemented by a number of voluntary agencies, conspicuous among which are the Teachers' Reading Circle, a State organization of more than 13,000 teachers, who study two professional books each year; the Young People's Reading Circle, with a membership of several thousand pupils; three general teachers' associations, with a combined membership of more than 6,000, and meeting annually; ninety-two county associations, and a number of

associations of teachers of special branches. In nearly every community of prominence a well-organized public library is maintained in close correlation with the public schools.

THE INDIANA EXHIBIT.

By an act of the general assembly, effective March 9, 1903, a commission was created and empowered to provide for an adequate representation of the resources, industries, progress, institutions, and attainments of the State at the Louisiana Purchase Exposition. The act conferred upon the commission full authority to determine the nature and extent of exhibits, to employ agents for the organization and management of such exhibits, and carried an appropriation of \$150,000, of which amount \$10,000 were appropriated for the purpose of an exhibit of educational facilities and progress. The commission appointed three of its own members a committee on education. This committee at once requested the indorsement of the project by the State board of education and the cooperation of the State superintendent of public instruction in the preparation of the exhibit. A superintendent was appointed and given large liberty in the organization and management of the exhibit.

The principle which guided in the selection and organization of material for the exhibit was the purpose to show three things by means of a cross section of school work :

1. The physical and personal equipment of schools of all grades from the kindergarten to the university and in all parts of the State.

2. The scope and organization of instruction.

3. The standards of efficiency or excellence in schools of all kinds in all parts of the State and in all departments of education, and giving thus the objective of the conscious effort of teachers and school officials. The effort was to select material with reference to the evident standard of excellence in each school corporation, not with reference to the standard of any one corporation nor to a State standard, nor to conform to the opinion of any judge or group of judges as to what constitutes satisfactory school work.

It was the purpose to make the exhibit historically true, an exhibit of Indiana school conditions and tendencies rather than a display of special features which were particularly strong. Material was accepted not with reference to its inherent worth, but because it was adjudged to be representative of what the contributing schools were satisfied to send out as a portrayal of the scope, organization, and efficiency of their educational effort. Little more than two months were given the schools in which to prepare their contributions to the exhibit. It was expected that a more truly representative portrayal of actual school work would be secured because the time was short. The material offered was necessarily a cross section of regular daily work. While the result could not be so attractive as an exposition feature, it certainly was more valuable for the student of educational conditions and of more value to the exhibiting schools, because it was a truer reflection of the actual situation. In every instance the contributing corporation exhibited the scope and character of school work of all grades maintained in the system and in all subjects of study and training provided. Something of the generally representative character of the exhibit is shown in the fact that such portrayal of the whole system was made by 82 counties of the 92 in the State, by 127 towns and cities, and by most of the colleges and normal schools.

Indiana was awarded a floor space of approximately 1,700 square feet near the southeast entrance in the Palace of Education. This floor space was divided into two sections, each of which was inclosed in an attractive façade 12 feet high, stained cherry and relieved with green draperies. The written matter was

bound in uniform volumes, half leather, of about 400 pages each. Photographic and art exhibits were mounted on boards, uniform in size, weight, and color, and exhibited in swing-leaf cabinets. Exhibits of manual training were shown in wall frames and in glass cases, with which most of the wing-frame cabinets were fitted. In all, 101 New Jersey School and Church Furniture Company wing-frame cabinets, a number of sections of the Globe-Wernicke bookcases, and a complement of library tables and chairs were used.

Material used, for the most part, was drawn from regular class exercises in which all pupils belonging to the class participated, and was selected as typical in form, method, and content of the regular instruction. The written work was done on uniform paper, from first draft work without correction, and arranged in volumes, first by subjects, and then by grades. The written exercises filled some 700 volumes, aggregating about 300,000 pages. The exhibit included also about 20,000 photographs and pieces of art work, beside many hundreds of pieces of manual work. Wall charts exhibited the location and strength of reading circles, the location of schools and distribution of all the public school teachers of the State. The administrative system was shown by means of graphics and specimens of all forms, blanks, outlines, bulletins, courses of study, reports, and other publications of the department, the whole filling three cabinets. A complete exhibit of text-books used in the public schools at the present time was thrown into relief by a collection of the books used prior to 1860.

The display of each corporation was shown as a unit. These units were so placed as to group the exhibits of higher and professional education in one part, the larger cities in another, the smaller cities in a third, the rural schools in a fourth, and the exhibits of the reading circles and of the administrative system in a fifth. It was thus easy for the visitor to go at once to the particular kind of work he wished to see. It also gave each kind of school the most favorable setting.

A conspicuous feature of the exhibit was the quantity and character of pedagogical literature displayed and distributed. In addition to the full set of text-books displayed, there was shown a complete set of books of both the teachers' and young people's reading circles. Besides the hundreds of copies of the School Law, the State Course of Study, institute outlines, department bulletins, Arbor Day books, directories, and department reports which were distributed to students of education, the State university published a thousand-copy edition of a volume in which the history of the university is reprinted, together with a bibliography of the publications by faculty and alumni of the institution, and a very careful and unique study of the evolution of the curriculum from the narrow academic course of 1829 to the full university organization of to-day. State Superintendent Cotton published a specially prepared volume of over 600 pages explaining, respectively, in three divisions, the administration and status of elementary, secondary, and higher education in Indiana. Two thousand five hundred copies of this volume were distributed. State Librarian Henry supplemented his large exhibit of the public library system of the State with a neat volume, specially prepared for the exposition, containing the history of every public and municipal library of the Commonwealth. The reading-circle board prepared and distributed several thousand copies of a neat brochure containing the history of the reading-circle movement in Indiana and a catalogue of all the books which have been used.

Aside from the representative character of the exhibit, the most conspicuous displays made by Indiana were the portrayal of the equipment, organization, and instruction in the rural schools of the State, the exhibit of rural-school consolidation, of the reading circles, and of the schools of the city of Indian-

apolis as representing the standard of efficiency toward which all of the schools of the State are striving.

Examination of the Indiana exhibit revealed the fact that her teachers are awake to educational problems and movements. They are thinking and attempting to work out their problems in the schoolroom. It also revealed that Indiana schools, in common with most schools in this country, have in recent years failed to give sufficient emphasis to the formal elements of education. Sufficient time is not devoted to training as distinguished from instruction. The critical attitude of mind is stimulated, to the neglect of the art of doing things properly. The schools too much assume in children the power of self-criticism and of self-correction.

The chief weakness shown, in the conduct of elementary schools particularly, is the lack of a clearly defined and consistently applied philosophy of education. This is manifest in the lack of system in the scheme of instruction.

At least four results should be realized from the exhibit:

1. A better definition of the lines and direction of educational effort.
2. A steadying of educational thought.
3. Increase of faith in public education, with increased liberality of support.
4. The establishment of definite and higher standards of excellence in the work of the schools.

INDIAN TERRITORY.

BY JOHN D. BENEDICT, SUPERINTENDENT.

THE EXHIBIT.

The exhibit of Indian Territory in the department of education was installed in the Territorial building, and consisted mainly of the following:

First. A collection of regular examination papers and written recitations.

Second. A collection of drawings, free-hand.

Third. A collection of maps drawn by pupils.

Fourth. A collection of oil paintings.

Fifth. Samples of sewing, of all grades, from plain stitching to fine embroidery and lace work.

Sixth. Samples of woodwork from Indian schools.

Examination papers were contributed by some of the public and private schools for white children, but nearly all of our hand work, or industrial display, is the work of Indian children, as is also much of our written work.

Our exhibit demonstrates the fact that in all kinds of hand work (writing, drawing, wood carving, and needlework) the Indian children excel the whites, while in mental work they are somewhat slower than white children.

KANSAS.

BY JOHN MACDONALD, DIRECTOR.

THE SCHOOL SYSTEM.

The State superintendent is elected biennially. He is required to visit each county at least once in two years, and to give his opinions on questions and controversies arising out of the interpretation and construction of the school

laws. He is ex-officio chairman of the State board of education and of the State text-book commission, and is a member of the board of school-fund commissioners. Salary, \$2,500 per year.

County superintendents are elected biennially. Each must hold a professional certificate, or a first or second grade certificate, or must be a graduate of an accredited college or normal school, and must have taught at least eighteen months. Must visit each school in his county at least once each term of six months. May in conjunction with district board dismiss teachers for cause.

Each school district board is composed of a director, clerk, and treasurer, elected at annual meeting; term, three years; one retires annually. Board employs all teachers.

Boards of education in cities are composed of three members from each ward in cities of first class; if more than four wards, two from each ward; term, three years. In cities of second class, two members from each ward; term, two years.

In country school districts the maintenance is largely from local tax. Maximum allowed, 2 per cent.

In cities 8 mills on each dollar of valuation is the maximum. When population is 30,000 or more, 15 mills (including building tax) may be levied. Maximum in cities of the second class, 15 mills.

The State board of education is composed of the superintendent of public instruction, chancellor of the State university, president of the State agricultural college, and president of the State normal school as members ex-officio. Three others, selected from among those engaged in school work are appointed by the governor. Term of office, two years. The State superintendent is chairman.

The State board may issue State certificates on examination, valid for three or five years or for life. Graduates of colleges or universities anywhere in the United States, whose courses are approved by the board, may receive certificates based upon their college grades, provided that such graduates pass an examination in philosophy of education, Kansas school law, methods of teaching, school management, and psychology.

The county superintendent and two persons, holders of first-grade certificates or of diplomas from the State university, State normal school, or State agricultural college, compose the county board of examiners. The superintendent is chairman ex-officio. All questions used in the examination of county teachers are prepared by the State board of education.

A normal institute lasting not less than four weeks must be held annually in each county. The institute is under the management of the county superintendent. He employs a conductor and instructors, who must have certificates from the State board of education. The course of study followed in the institute is prepared by the State board of education.

All men and women 21 years of age or more, who are residents of the district or precinct, have the right to vote at every school meeting in the country districts, or for members of the board in cities.

Text-books are adopted every five years for all the schools in the State by a State text-book commission, of which the State superintendent is chairman ex-officio. It consists of eight members, appointed by the governor. Not more than three shall be selected from any one political party.

Boards of education in city and country may levy a tax not to exceed one-half mill upon the dollar for the equipment and maintenance of industrial-training schools or industrial-training departments.

Every school district may vote a tax annually, not to exceed 2 mills on the

dollar, for the buying of books for the school library. The board in its purchases is limited to history, biography, science, and travels.

Every child between the ages of 8 and 15, inclusive, must be sent to a public, private, denominational, or parochial school, taught by a competent instructor, during the whole school year. The law is enforced by truant officers.

THE EXHIBIT.

The director of the Kansas educational exhibit, Chancellor Frank Strong, of the University of Kansas, was appointed early in September, 1903, and later in the month John MacDonald, editor of the *Western School Journal*, was selected by the director to superintend the work.

The preliminary circulars were sent out early in October. They asked for photographs of representative school buildings, with children and teachers in front; photographs of interiors, showing decorations, school libraries, apparatus, and children at work; photographs of children at play; manuscripts of pupils' work in the grades or classes of country and city schools; relief maps, drawings, botanical and entomological specimens; articles showing the work in manual training schools; kindergarten work; catalogues, programmes, courses of study in country schools, graded and high schools; photographs of grounds; international, interstate, and intercity children's correspondence; original charts made by teachers—for instance, in language and numbers; architects' model plans of one-room country schoolhouses, showing interior, elevation, plan for heating and ventilating, grounds, and closets; architects' model plans showing improved ways of lighting, heating, and ventilating grammar and high school buildings; progressive maps in geography; scrapbooks used in history, geography, or literature classes; free-hand and mechanical drawing, nature-study charts; photographs of pioneers in school work in country or city.

There were prompt and hearty responses from city and country and from the higher institutions, and it was soon evident that Kansas would need all the space assigned to it and probably more. The Kansas booths were the first completed in the Education Building. The structure was built of cypress and was 45 feet long, 30 feet wide, and 15 feet high. The number of large maps, relief and plane, of photographic groups, of articles from manual training schools, and the many cards of drawings made it necessary to use not only the side and end walls, but to build six interior partitions to furnish additional surfaces. The total wall area was 3,828 square feet, or 425 square yards.

The total cost of the exhibit, including the structure, furniture, salaries, and transportation, was about \$6,000.

The open installation, as it is termed, has its advantages in that it makes fanciful decorations possible, but with a limited floor space, vacuums and columns put a complete exhibit of school work out of the question. The Kansas space was between two public aisles, and these were connected by a central aisle 7 feet wide. On one side of this aisle were the exhibits from the elementary schools, classified in alcoves, three in number, as rural schools, city schools, and manual training. The other side of the central aisle was given to higher education, divided into alcoves as in the elementary department, and containing work from the University of Kansas, the Kansas State Normal School, the county high schools, and the church colleges.

On the upper part of the walls a series of large cards, 71 in number and lettered so that they could be easily read from the floor, was placed in the form of a frieze. On each card there was given in the fewest possible words

information concerning the Kansas schools and the result of their work. Here are several which may serve to show the character of the rest:

The total amount of money raised for all purposes in Kansas in 1903-4 was \$16,903,157.50. Of this amount \$4,882,327, nearly one-third of the whole, was for the support of the public schools.

Education should be as broad as man. *Emerson.*

Kansas has 30 colleges, 434 high schools and academies, and 8,979 public schools.

Miniature normal schools—The total attendance in the normal institutes of Kansas in 1903 was 10,119.

Women have the right to vote in every school district in Kansas, in county and city.

A cheerful giver—The tax to support the public schools is the tax the Kansan pays with the greatest cheerfulness.

It is estimated that at least 90 per cent of the Kansas teachers are members of Christian churches.

In the elementary department there was work of some kind from about 400 country school districts and from 104 cities. Many of the smaller cities represented are under the jurisdiction of county superintendents; hence their exhibits may properly be considered as part of the display from rural schools.

In the Kansas school exhibit the work of the elementary schools was made prominent, and the subjects taught in the grades below the high school were given the place of honor. Class work in orthography, writing, language, grammar, geography, United States history, arithmetic, and physiology was mainly in book form. There were in the exhibit about 350 neatly bound books of written exercises. In the cabinet cases drawing, photographs, and kindergarten work were displayed. While the kindergarten is not yet made by law a part of the Kansas school system, it has worked its way into primary rooms everywhere in city and country, and it is probable that the display of kindergarten work in the Kansas cases was as complete as any other exhibit of the kind in the building. In addition to that sent from the public schools there was a special exhibit of the work done in the Sheldon Kindergarten, Topeka. This school has been maintained a number of years by Rev. Charles M. Sheldon, Topeka, and his congregation. The elevating and refining results of this kindergarten work for negro children are plainly visible in the homes represented in the school.

Considering that manual training is still in its infancy in Kansas, the superior skill shown in the woodwork, sewing, and clay modeling exhibited by Kansas City, Pittsburg, Wichita, Topeka, Lawrence, Salina, and Seneca, and the county of Pawnee was noticeable. The acts passed by the legislature of 1903, authorizing small grants to cities or schools maintaining manual training departments, will stimulate many boards of education to begin the work, and the manual training exhibit which Kansas will send to the next world's fair, wherever it may be, will demand much larger space than could have been granted in 1904.

It should be said that in the Kansas State Normal School and in the Kansas State Agricultural College the training of the hand is not a new study and that both institutions sent fine specimens of their work to St. Louis.

The higher institutions were shown mainly in a pictorial form in our booths. The University of Kansas was seen in a collection of 55 photographs, in which nearly all the buildings and class rooms spoke effectively to the eye, and the work of the State agricultural college was made clearly visible through 144 photographs in a revolving machine attached to an electric motor in our central aisle. The class work of the agricultural college was a part of the

exhibit made by the United States Department of Agriculture in another part of the Education building. Fine drawings, miscellaneous work in wood, photographs, and written class work represented the Kansas State Normal School.

Perhaps the exhibit which attracted the most attention was that of the county high schools of Kansas. It was studied by many because of its uniqueness, for it was the only exhibit of its kind in the Palace of Education; by others because it proved that in Kansas the articulating of the rural schools by the means of county high schools with the higher institutions of learning is no longer an experiment. Twelve of the 19 schools now established in the State were represented in our booths by written work, drawings, and photographs, while tables of statistics and a map showed to every visitor how important a part of the Kansas school system the county high schools have become. There are 19 of them now in successful operation and more are coming.

As the exhibits from the Kansas State School for the Blind and the State School for the Deaf were in the living form, it was necessary to find space for them in another part of the building. The recitations given daily during several weeks in the summer by the nine children brought to the fair by Supt. Lapiere Williams, of the School for the Blind, and by Supt. H. C. Hammond, of the School for the Deaf, kept the aisles in front of the class rooms thronged while the exercises were in progress. Both exhibits demonstrated to thousands of interested spectators the skill, faithfulness, and kindness which characterize the teaching in both institutions.

After a careful inspection of the Kansas school exhibit one acquainted with the progress of education in the State would easily come to the following conclusions:

1. That the work in the schools of Kansas has made a great advance since the world's fair of 1903.
2. That improvement in the teaching of all the studies usually taught in elementary schools is distinctly visible.
3. That solid foundations have been laid for enduring work in manual training from the kindergarten to the high school.
4. That blind experimenting in the teaching of drawing is disappearing and that the demand is growing for more skillful work and more competent supervision.
5. That while the highest and noblest work done in our schools—the making of character—can not be shown in an exhibit, there was an atmosphere enviroing the material things on walls and tables and in cases which surely must have conveyed to every visitor the impression that the government and moral influences in the schools of Kansas make for righteousness and the highest type of citizenship.

MASSACHUSETTS.

BY GEORGE H. MARTIN AND GEORGE E. GAY.

ORGANIZATION.

I.—THE STATE SYSTEM.

The system of public education in Massachusetts is characterized by a maximum of local independence with a minimum of central control.

The State board of education.—The State board of education consists of the governor and lieutenant-governor, ex officio, and eight others appointed by the governor for a term of eight years; one retiring annually.

The board is responsible for the management of the State normal schools, ten in number, the holding of institutes, the gathering and publishing of the school statistics of the State, and other matters defined by statute.

The secretary.—The secretary of the board of education is usually classed with the State superintendents of schools. He works partly under the direction of the board and partly under the immediate direction of the statutes. His principal duties may be summarized as follows: To make abstracts of school returns, collect information respecting the condition and efficiency of the public schools and other means of popular education, and distribute the same for the benefit of the general court and the public; to visit schools, make educational addresses, and serve as one of the two commissioners of the Massachusetts school fund; to perform such miscellaneous duties as would naturally fall to the chief executive officer of the board.

Agents.—The board employs several officers called agents. Their duty is to visit the schools, confer with teachers and the school authorities, give educational addresses, and in general to promote through advisory means the welfare of the public schools.

The State school fund.—The school fund is \$5,000,000. The entire income of the school fund is divided among those towns of the State whose valuation is less than two and a half millions of dollar.

Forms of financial aid by the State.—These are as follows:

1. Distribution of income of school fund.
2. Tuition of high school pupils in out-of-town high schools.
3. Part of the salary of district superintendents.
4. Tuition and support of deaf, blind, and feeble-minded children.
5. Forty scholarships each in the Massachusetts Institute of Technology and the Worcester Polytechnic Institute.
6. Annual appropriations to the State and county teachers' associations.
7. Support of normal schools.
8. Several scholarships in the Massachusetts Agricultural College.

II.—LOCAL SCHOOL SYSTEMS.

Each town and city is a unit in the management of its schools. There are no local subdivisions for support or control.

Kinds of schools.—The highly organized system of the cities and larger towns comprises kindergartens, primary schools, grammar schools, high schools, and evening schools. A few support vacation schools. In the more sparsely settled communities the ungraded school is still the prevailing type.

High schools.—These schools are required in towns having more than 500 families. They are authorized in smaller towns. Towns which do not maintain high schools must pay for the tuition of properly qualified pupils who desire to attend high schools in other towns. For such tuition the State reimburses towns whose property valuation is low.

Evening schools.—Evening elementary schools are required in towns and cities whose population exceeds 10,000, and evening high schools in cities having an excess of 50,000, if petitioned for by fifty or more residents over fourteen years of age who desire to attend such a school.

Vacation schools.—Vacation schools are not required, but are being established in increasing numbers.

Courses of study.—The State in statutes names certain studies which must be taught in all schools and others which may be taught. It also fixes a minimum length of the school year, but it prescribes no course of study. Each town and city fashions its own.

Elementary schools must be maintained for at least thirty-two weeks in each

year, but in towns having a specified low valuation the term may be reduced to twenty-eight weeks. High schools must be provided with courses at least four years in length and must be continued at least forty weeks in each year. Graded schools throughout the State are organized generally on a basis of a thirteen years' course, with annual promotions. Frequently the first three grades are organized by themselves into primary schools in separate buildings. The next six grades form the grammar schools and the last four the high schools.

Selection and pay of teachers.—The local school committees have full power to appoint and discharge teachers. Annual election of teachers is the prevailing custom, but committees are authorized to elect "to serve during the pleasure of the committee," and in Boston and some other cities teachers are so elected after serving a prescribed number of years, and enjoy permanence of tenure.

Support of the schools.—Schools are supported mainly under the general law—"Towns shall raise by taxation money necessary for the support of public schools." The amount raised by local taxation is supplemented by State aid in some towns. A few small local funds are also available. In Boston the amount to be raised for school purposes is limited by law to a fixed ratio of the valuation; elsewhere it is unlimited.

Conveyance of children.—In some towns neighboring small schools have been consolidated; in some others all the children are brought to one central building.

Local supervision.—In each town and city the schools are in charge of an elective body called the school committee. Women may vote for members of this body, and women may also serve on it. The members are chosen for three years, one-third retiring annually.

Every town and city, either alone or in a union district with other towns, is required to employ through its school committee a superintendent of schools to have the care and supervision of the schools, under the direction and control of the committee. In order that all the towns may enjoy the benefits of professional supervision, small towns are required to unite in districts and employ a superintendent.

III.—SCHOOL ATTENDANCE AND TRUANCY.

The period of required school attendance is between the ages of 7 and 14. Children between these ages must attend all the time the schools are in session.

For the care of habitual truants the counties are required either separately or jointly to maintain county truant schools, to which boys may be committed after conviction, on complaint of a truant officer. Truant girls are sent to the State Industrial School for Girls.

IV.—EMPLOYMENT OF CHILDREN.

No child under the age of 14 years may be employed in any factory, workshop, or mercantile establishment. No such child may be employed for wages during the hours when the schools are in session, nor before 6 o'clock in the morning, nor after 7 o'clock in the evening.

No child under 16 may be employed without an age and schooling certificate approved by the superintendent of schools.

THE EXHIBIT.

An educational exhibit may serve several purposes. It may show the best written work of the best pupils, as an agricultural exhibit shows the best corn and wheat. It may show an educational plant, schoolhouses, grounds, apparatus, etc. It may show courses of study and methods of instruction. It may show statistics of work done, of growth and development. It may show

methods of school organization and administration. In general, it may show what the people of a community or State believe to be worth doing for school children and what they believe it to be worth while for children to do in school; for we have come to understand that children can do many different things well and with some advantage to themselves and the community, and that the crucial question in public education is, On what things and for how long time shall school children be employed during the hours that they are in school?

The Massachusetts exhibit served all these purposes, but its emphasis was laid upon school organization, courses of study, and means and methods of instruction. It was not primarily an exhibit of fine penmanship, though penmanship was treated as an important school exercise. It was not specifically an exhibit of drawing, though drawing was represented as holding a high position among the several studies taught in the schools of Massachusetts. It was not an exhibit of manual training, though several excellent courses of study in this department were shown. It was not a collection of pretty exercises made by pupils and teachers for exhibition at the World's Fair; happily, their day has passed.

In a general way the things represented by the exhibit may be classified and described as follows:

1. School organization, shown by reports, charts, and printed pamphlets.
2. School architecture, shown by photographs of school buildings.
3. Courses of study, shown by printed pamphlets, descriptive charts, and illustrative exercises selected from the written work of school children. These were shown in the wall cabinets, 114 in number, which lined the walls and filled the alcoves of the exhibit booth, and formed the most prominent feature of the exhibit.
4. Illustrative school apparatus, designed and made by school children. This was placed in show cases and on exhibit tables.
5. Manual and industrial training models, including sewing, made by pupils, arranged in logical order and numbered serially. These were placed on the walls of the booth above the cabinets, in show cases, and in drawers beneath the exhibit tables.
6. Bound volumes of class exercises prepared and copied as special World's Fair work.
7. Bound volumes and pamphlet cases of class exercises, original drafts, prepared as regular exercises without the knowledge of anyone that they were to be used for exhibition.
8. Bound volumes and pamphlet cases of class exercises prepared as in No. 7, with corrections by the teacher, followed by revised copies made by pupils.
9. The exhibit of the Massachusetts Agricultural College.
10. The exhibit of the ten State normal schools.
11. Exhibits of the Lowell Textile School and of the Massachusetts Nautical Training School.
12. The exhibit of free public libraries in Massachusetts.

The special circulars sent out to superintendents and principals called for exhibits as follows:

1. School architecture, buildings, laboratories, equipment, heating, ventilation, etc., shown by photographs, plans, etc.
2. School organization, rules, regulations, etc.
3. Courses of study, in brief and in full, illustrated by the written work of pupils.
4. First drafts of written papers, regular daily work.
5. Corrected written work, regular daily work.
6. Special exercises prepared for special occasions.

7. Hand work of pupils, made to illustrate subjects of study.
8. Portfolios of drawings.
9. Portfolios of photographs.
10. Manual training models, numbered in series and attached to screens.
11. School exercises of any kind that show orderly development, theories of instruction, and principles of method.
12. Original investigation of educational problems.
13. Office equipment.
14. Homemade apparatus.
15. Administrative blanks.

The response to circulars was not general, and most of the material exhibited was obtained by the personal solicitation of the director.

The following cities and towns contributed to the exhibit:

Athol, Auburn, Becket, Boston, Brookline, Chester, Clinton, Everett, Fall River, Fitchburg, Gardner, Georgetown, Groveland, Haverhill, Lawrence, Lowell, Lynn, Malden, New Bedford, Newton, North Adams, Northampton, Orange, Pepperell, Pittsfield, Revere, Somerville, Springfield, Sutton, West Brookfield, Weston, Winthrop, and Worcester.

Among the most prominent and valuable features of the exhibit were those representing the Massachusetts Agricultural College and the State normal schools. The agricultural college occupied a large space in the educational exhibit and was also the most prominent donor to the State exhibit in the Palace of Agriculture, while it contributed generously to the general exhibit of the agricultural colleges and experiment stations collected and arranged by the United States Government. The normal schools, under the advice of the director, took, in general, a single branch of study each, and showed the method in which the study is pursued. In this way no duplications were made, and the collective exhibit gave a satisfactory view of normal school work in the State.

Of the cities and towns the following deserve especial mention:

BOSTON.

The exhibit of the city of Boston formed a part of the Massachusetts exhibit. It was limited in space and therefore had no room for ornamentation beyond that which was furnished by the work itself. While it was in harmony with the rest of the State exhibit, which was simple, but effective and beautiful, it was filled to every inch of space with charts—graphic and statistical—and with work direct from the schools, and every part generously illustrated and aided by photographs. The wall space allotted to Boston admitted of the close placing of 24 cabinets, and 6 more were placed in the center.

Though apparently restricted in space as compared with other large cities, yet every subject of school work, of both day and evening schools, was shown in detail, from the kindergarten through the normal school. The work of the evening drawing schools was vividly and systematically arranged on the outside of the booth.

The work was exhibited by subjects. The first cabinet contained the kindergarten work; the next 11 cabinets the elementary nature study, geography, arithmetic, history, music, physical training, drawing, language, cooking, and manual training; the next 10 the high school work in English, literature, history, commercial branches, botany, zoology, physiology, drawing, mathematics, physics, chemistry, foreign languages, and the work of the Mechanic Arts High School; then one cabinet showing administration and public lectures; one cabinet for normal school work; one for work of the Horace Mann School for the

Deaf and Dumb; one of sewing; four cabinets for evening elementary, evening high, and educational center schools.

The space in the wall cabinets amounted to about 4,000 square feet. Below these wall cabinets were show cases, or counters, containing note books and manual work in the subjects shown above; and beneath these were shelves for the bound volumes, pamphlets, and industrial work of the vacation and evening schools. Above the cabinets were panels containing the shop work of the day schools, extending around the entire space. On the wall above the panels were pictures of school buildings, etc.

The plan of the exhibit was designed for the convenience of educators who desired to study it, and the number who spent hours with notebooks in hand testified to the wisdom of the arrangement. Every school in the city was represented. In February each master was requested to send in work in whatever subjects he should choose. Most of the work had been done in the regular daily routine and was simply copied on the proper paper for uniformity. From the work thus sent in a committee of teachers selected that which would cover the course of study and arranged it in proper order. The most important feature of the exhibit was that it represented the regular work of the schools of the city.

The papers and photographs in the wall cabinets exemplified the course of study and the 200 volumes showed the quality of the work by classes. Equipment, methods, and material that could not be shown otherwise were shown by photographs. Two methods of teaching reading in the first grade were shown by series of photographs. The glass door of each cabinet held a large photograph appropriate to the work contained in the cabinet. The aim of the photographs was in every case to make clearer the work of the schools and not for ornamentation. The graphic charts in the administration cabinet showed plainly the school organization, the growth of the schools, the relative number of male and female teachers, the course of study and relative amount of time given to each subject, and, in fact, nearly everything that the student of education would desire to know.

Worcester had a full representation of elementary and high school work, filling six "units" and covering a large wall space. New Bedford presented a full exhibit of school work in all departments, with a large number of photographs representing school architecture. Springfield gave a complete representation of her work in the evening school of trades, a fine exhibit of high school work, and a fully illustrated course of study in arithmetic. Somerville sent a masterly representation of the work of her English high school, with careful and complete representation of her courses of study in language, drawing, and penmanship. Brookline showed a complete course of study in manual training. Lowell showed the work of her evening schools, her training school, and her kindergartens. Lynn sent a full exhibit of work in arithmetic and a representation of her work in manual training in her English high school.

The features of the Massachusetts exhibit which attracted most attention from visitors were the Boston high school exhibit in language, a fine representation of the highest standard of exhibition work, the exhibit of nature study by the practice school of the Bridgewater normal, the correlated school and home work shown by the training school of the Hyannis normal, the exhibit of the State library commission, and the exhibit of the evening school of trades, Springfield.

Unique features were the exhibits of the Lowell textile school, the nautical training school, the educational centers of Boston, the work of vacation schools in Boston, the high school organization from New Bedford, the designs from the

Somerville high school, the sloyd training school, and modern methods in kindergarten.

In general, it may be said of the Massachusetts educational exhibit that it showed fully the present attainments of a State school system which gives the largest possible local freedom in the management of schools, attainments which, in the minds of her citizens, justify the confidence which has been given to them from the founding of this ancient Commonwealth.

MISSISSIPPI.

BY T. L. TRAWICK.

THE EXHIBIT.

This exhibit was collected by Prof. T. L. Trawick, then residing at Crystalsprings, Miss., and though hurriedly gotten together was a very fair representation of the Mississippi educational system.

The State department was represented by six very elaborately prepared charts, five showing the statistical side of educational matters. The colleges were very meagerly represented, the agricultural and mechanical being the best. The colored colleges of Alcorn and Tougaloo were exceedingly well represented. The following high schools were represented: Crystalsprings, Greenville, Corinth, Jackson, McComb, Hattiesburg, Wesson, Grenada, Canton, Meridian, Columbus, Brookhaven, Learned, Utica. The high school exhibits were excellent, especially the one from Crystalsprings. The work of this school was arranged according to a plan adopted by the Washington, D. C., schools at Paris in 1900, and was composed of photographs of pupils at work in school. Jackson also had a fine exhibit of manuscript work.

Among the private schools the work displayed from French Camp and Blue Mountain College was excellent.

Mississippi's booth was well arranged and her exhibits were tastily displayed.

MISSOURI.

BY G. V. BUCHANAN, SUPERINTENDENT.

THE EXHIBIT.

The space allotted to Missouri for her educational exhibit consisted of a strip of floor space 30 feet wide and 140 feet long, lying near the main entrance to the building. This space fronted on the main aisle and extended back between 15-foot aisles. Immediately across one of these aisles was the exhibit of the city of St. Louis, occupying an equal area, and just beyond the St. Louis exhibit was that of the State university. Thus the Missouri educational exhibits presented a continuous front on the main aisle of the building of 105 feet, with an extreme depth of 140 feet.

For the purpose of collecting and arranging this educational exhibit the State

commission appointed Supt. G. V. Buchanan, of Sedalia, late in August, 1903. He at once began a series of visits to the county teachers' associations, which were held in the different counties through the fall and early winter, and with his assistants in the work presented the interests of the exhibit personally to about 10,000 teachers. Correspondence was then opened with the 114 county commissioners and county superintendents, with many city superintendents, and with teachers and school patrons who had been found to be enthusiastic for the exhibit. A systematic effort was made to secure exhibits from all the counties of the State—not from the city schools alone, but from village and rural schools as well. A circular outlining the scope and nature of the exhibit and giving general directions and suggestions about the preparation of the work was mailed to every teacher in the State. General interest was awakened, and it was apparent that the teachers of the State were ambitious to have the schools well represented in the exposition. In November the superintendent opened an office on the exposition grounds and conducted a vigorous canvass of the State by personal letters. Late in February the exhibits began to come in. He appointed as his assistants in arranging and maintaining the exhibit the following teachers: Miss Minnie Brashear, of Kirksville; Miss Catherine Cranmer, of Otterville; Miss Emma Serl, of Kansas City; Miss Mae Hansel, of Joplin, and Miss Jennie Hinkston, of Gower. The packages were opened and their contents examined and arranged in Blair Hall of the Missouri building, and as soon as our exhibit booth was ready the cabinets and bound volumes were put into place.

The Missouri exhibit was arranged by grades, or years' work, with a view of showing the prevailing system in this State, which separates the course of public school education into twelve years' work. Our entire floor space was surrounded by an arched façade 12 feet high, with an arch 18 feet wide constituting the front entrance. Each side of the inclosure consisted of ten similar arches. The oak cabinets containing the work of the children were so placed as to leave a central aisle 7 feet wide extending from front to rear of our space, and to divide the area into 20 compartments with side partitions 8 feet high, each compartment opening at one end upon the central aisle and the other looking out upon the broad aisle of the building through these arches, with a hand rail below. This arrangement gave 20 compartments, somewhat separated, in which to arrange the school work, all comparatively open, so that their entire contents were visible from the broad aisles on either side and from the 7-foot aisle through our own space.

While the kindergarten is no part of the public school system of the State, not being provided for by law, yet it is so generally regarded as a desirable beginning for all classes of children that it was decided to give it such position in the exhibit. From the twelfth grade, or senior year of the high school, down, each grade was allotted a separate compartment as far as the third; grades 3 and 2 occupied their proper sides of one compartment, and grade 1 and the kindergarten took similar positions in the lowest compartment. The compartments not occupied by the primary and secondary schools were assigned to the State normal schools and to the various colleges of the State. One side of one compartment, however, was reserved for the exhibits of special rural schools and an entire compartment for the exhibits of the negro schools of the State.

The façade, or arched wall, surrounding the State exhibit was of old English oak in modified Romanesque style of architecture, the same as used by the city of St. Louis just across the aisle, which was designed by Superintendent F. Louis Soldan, of that city. Mr. Ittner, head architect of the St. Louis school

board, gave this unique design its pleasing reality. The arches were supported by ample pillars, which offered abundant space for broad panels and large disks, into which pictures could be placed. The spandrels of the arches also invited the use of disks for pictures. To enable the façade to help tell the visitors the nature of the contents of the various compartments, transparent mosaics over the middle of the arches told the grades or named the colleges whose exhibits were within, and large panels and disks in the outer faces and smaller panels in the lateral faces of the pillars, and circular disks in the spandrels of the arches contained transparencies of school buildings, games, and faces appropriate to the grade of work. For example, as you stood in front of the compartment occupied by the exhibits from special rural schools you saw in glowing mosaics, above the center of the arch, "Special Rural Schools." In the broad panel on the side of the pillar supporting one side of the arch you saw the transparency of a Missouri rural schoolhouse of the better class. In the 16-inch disk just above this was a transparent picture of a country school playground alive with lusty boys and merry girls, just as caught by the camera in one of our rural districts. On the lateral face of the same pillar were arranged five 8 by 10 transparencies of country school children engaged in various sports, games, and class exercises. The spandrel above one disk showed a typical country lad returning from school, with his bookstrap thrown across his shoulder. Looking in upon the compartment from the same spandrel another disk contained a typical country school girl. In the compartment occupied by the Kirksville Normal School the name of the school stood out above the arch in illuminated mosaics. The large panel on the outside of the pillar contained the main view of the campus and buildings of the school. The lateral faces of the pillar contained transparencies of primary rooms, classes in the normal department, laboratory, and gymnasium scenes, and classes surveying and studying botany on the campus. On the spandrels of the arch the faces of two girls and two boys, selected as representative students of the different classes in the school, looked down upon the visitor.

In this same manner did each compartment suggest to the thoughtful student or the casual observer the nature of the work it contained.

Aside from the 300 transparencies of Missouri schoolhouses, school children, games, and recitations, the façade also presented the faces of 40 of the leading educators of the State, past and present, as selected by a committee of five of the best-known Missouri educators.

Within the compartments the work was chiefly arranged in bound volumes, base cabinets, and wing-frame cabinets, or filed in the portfolio drawers, or hung up on the 8-foot partitions.

Of the volumes there were nearly 500, of about 600 pages each, containing most of the written work and free-hand drawings of about 100,000 children, representing nearly 5,000 different schoolrooms in 80 counties of the State. These volumes were handsomely bound in red English cloth, with backs and tips in russia leather and with gilt lettering. In each grade compartment the papers were arranged by branches, and the order of contents of the volumes was by counties, comprised by the initials on the backs. Each volume was indexed, showing the location of work from the various districts within the counties. This arrangement facilitated the finding of work of individuals or schools. The work of any pupil in any branch of study could be found within a minute if his name and grade and the names of his county and teacher were known. We estimate that the work of about 60,000 pupils was found for visitors within the life of the exposition. On the shelves and within the showcase tops of the base cabinets, of which we used 139, various articles were shown, such as raffia work, clay modeling, pottery, needlework, wood carving, etc.

Within the portfolio drawers were maps, charts, drawings, etc.

The wing-frame cabinets, numbering nearly a hundred, contained a variety of work, such as essays, examination and test papers, drawings, and water colors.

On the walls were hung framed pictures of half a hundred of Missouri's excellent school buildings of rural, village, and city types, drawings, photographs, charts, relief maps, and the like.

The arrangement for exhibiting manual-training work of the various grades was peculiar to this exhibit. End cases with glass fronts were made to order of the same material as the cabinets and set at the entrance to the different compartments. Each was filled with such manual-training work as seemed to be best representative of all the manual work sent from schools of the particular grade. Thus the manual-training work of each grade was set beside the general exhibits of that grade. When the work was completed it was easy to see that the manual work of the children, like their penmanship, began with larger and coarser forms and gradually grew finer and neater to about the seventh grade. From there on through the high school the work grew less delicate and less exact and painstaking. This decline in neatness and exactness in the high school did not seem to appear in those schools which give full courses and systematic work in manual training.

The most attractive feature of the exhibit were two graphophones, which recited lessons and sang songs learned from the children in the schools, and seven biogens, or large mutoscopes, showing the physical culture of the schools from the kindergarten to the State normal schools. Groups of people constantly formed about these machines watching the simple movements of the little children, the free-arm exercises of the elementary grades, the dumb-bell and Indian-club drills of the grammar grades, and the gymnasium exercises of the high school pupils, which were almost as realistic as if the visitor had been standing in the room where the drills were in progress.

All the recitations, drills, and exercises were from Missouri schoolrooms, and so arranged as to show a system of development. One of the most valuable of our educational exhibits, perhaps, was the Missouri model rural schoolhouse, which was located in a beautiful grove near the Fine Arts Building. This house consisted of a model schoolroom 23 by 29 feet, with cloak rooms and toilet rooms for boys and girls, and a basement for furnace, fuel, and work bench. The expense of the building was limited to \$1,200, and it was the desire of the commission to show that every convenience and comfort of a modern city schoolroom may be enjoyed by any country district at an expense of not more than \$400 over what is usually put into the common and inconvenient form of country schoolhouses. This model schoolroom was lighted from one side, the light coming to the children from their left, was heated by fresh warm air, ideally ventilated, and had as good toilet accommodations as are on the market. The water used came from a cistern at the side of the building and was carried up by a hand force pump and air-pressure tank.

This schoolroom was equipped with all necessary school appliances and had an experienced rural teacher ready to welcome visitors and explain the various features of the building.

Two thousand copies of the plans and specifications of this building were published in neat pamphlet form for distribution among the rural school directors of the State.

The total expense of the educational exhibit of this State was slightly more than \$100,000. The part for which the State commission was responsible cost about \$75,000. The general exhibit of the State, not including the city of St. Louis and the four universities, cost about \$40,000.

Aside from the exhibits of the public schools of the State were those of the

following institutions: The Kirksville State Normal School; Cape Girardeau State Normal School; Missouri Valley College, at Marshall; Central College, at Fayette; Lexington Female College; Westminster College, at Fulton; Howard-Payne College, at Fayette; Drury College, at Springfield; Central Wesleyan College, at Warrenton; Liberty Ladies' College; William Jewel College, at Liberty; Christian College, at Columbia; Park College, at Parkville; Harden College; St. Cecilia Seminary, and Loretto Academy.

NEBRASKA.

BY ERWIN HINCKLEY BARBOUR.

THE EXHIBIT.

Shortly after the appointment of a director (or superintendent) of education by the Nebraska State commission to the Louisiana Purchase Exposition, circular letters were addressed to nearly 10,000 schoolmen and schoolwomen of Nebraska. Through the courtesy of Mr. W. K. Fowler, State superintendent of public instruction, the mailing list was made up from his corrected manuscript list of the schools and teachers of the State, both public and private.

Later developments showed that circular letters were insufficient for the purpose and that considerable apathy existed, which had to be overcome by personal appeal. Because of the small legislative appropriation the commission found it necessary to limit the amount for educational exhibits to \$4,250. This sum was made to cover all costs of installing and maintaining not only the educational booth proper, but also two classes and teachers from the school for the deaf and a booth in mines and metallurgy. It has been said, and it is doubtless true, that no other similar educational exhibit was prepared and maintained at less cost.

The architectural plans of the booth were prepared by Mr. Thomas Kimball, of Omaha, and consisted essentially of a plain four-column façade in white, suitably decorated with symbols of education, and with the great seal of the State and of the University of Nebraska in relief. Wide counters with curtained shelves beneath extended around the three walls, with two large tables and wings projecting from each of the two side walls. The color scheme was a subdued green, and all the draperies, furniture, card mounts, wall trimmings, counters, and floor were made to match.

The tables, counters and shelves were devoted to bound volumes of school work, portfolios of drawings, and show cases. Cabinets for card mounts and suitable show cases were provided. Card mounts paneled off by oak molding and corner blocks were arranged uniformly over all blank wall spaces. The rear wall was reserved for large drawings and paintings, and was enlivened by two double ornamental windows imitating leaded glass. Alternating panes were embellished by educational statistics and literary symbols. Suspended overhead was an original lantern in imitation of stained glass, designed and executed by a schoolboy of Lincoln, and near it a large circular stained-glass churchwindow designed and executed by the club women of Omaha. The entrance to the booth was rendered additionally attractive by large colored transparencies from the Morrill geological expeditions of the University of Nebraska. Omaha, Lincoln, Kearney, Hastings, Beatrice, York, Fremont, Plattsmouth, Falls City, Peru, Crete, Crawford, Columbus, Craig, Tecumseh,

Bellevue, Gering, Wahoo, and other towns and many rural schools were represented. Special exhibits were made by the Institute for the Deaf, Institute for the Blind, the State Normal School at Peru, the State Forestry Association, the State Forestry School, the University of Nebraska, Union College, the State library commission, the State geological survey, the State botanical survey, the State Engineering Society, the State Ornithologists' Union, the Nebraska weather bureau, women's clubs, etc.

The work of collecting, preparing, and forwarding material was shared chiefly by Miss Carrie A. Barbour, Miss Helena I. Redford, Mr. E. G. Woodruff, and Miss Edith L. Webster, assistants in the University of Nebraska. Miss Webster was given charge of the exhibits during the entire period of the exposition. Among the special features of the exhibit, the one cherished was that of honest representation. The work was not recast for special display, but was shown as it came from the pupils, with errors and corrections still in evidence. So far as can be learned, pupils were not generally forewarned and few knew that their work was to be displayed. In the case of the larger schools, where the notebooks and the written work are of exceptional excellence, the director of exhibits selected and made up the bound volumes out of material laid aside before the legislature had acted upon the State appropriation for the exposition. The exhibit was genuine throughout. The tendency toward laboratory methods and applied science was pronounced, even in the work of the rural schools. The rapid advancement of Nebraska's educational standard to its present position of lowest percentage of illiteracy on the western continent has depended, as does the survival of any pioneer, upon resourcefulness. Throughout the State great stress seems to have been laid on original work in every grade, resulting in many individual pieces of striking merit, some of the most interesting coming from isolated villages and rural schools on the western border.

Among the special features an important one was the work of women's clubs in their efforts for the establishment of parks, playgrounds, gardens, and more commodious schoolhouses; in the organization and maintenance of city and home-improvement societies, traveling libraries, and charity organizations; in original investigation and the education of certain worthy poor. The State Library Association made an extensive exhibit of large photographs of the exteriors and interiors of all the libraries of the State, carrying the matter even to the traveling libraries in the villages and rural homes. Accompanying this were published reports and statistical matter of value.

One of the striking features of the exhibit was the Omaha manual training display. The work was of such excellence and of such exceptional finish and beauty as to attract general notice. The work of every grade was shown in the order of progression, as well as the beautiful piecework, turned work, and inlaid work which certain students of the Omaha High School were allowed to make as a recognition and reward for proficiency in required work.

The school for the deaf at Omaha was represented by work in plain and fancy sewing and embroidery, by an especially large and creditable display of art work, by bound books of class work and statistics, and by two "live" classes. During the month of June a class of six pupils and teachers was maintained and was in operation daily, illustrating the method of teaching the youth of the institute for the deaf. Again, during the month of October a class of eight pupils and teachers in art work gave daily exhibitions of methods.

The Nebraska School for the Blind, at Nebraska City, exhibited lace, plain and fancy sewing, embroidery, knitting, weaving, beadwork, basket work, ham-mocks and nets, brooms and brushes, the exhibit being large and creditable in

every line of work. The State Forestry Association exhibited publications of the society. The State Forestry School exhibited the work of students, various forestry scenes, seeds, and sections of timber grown in Nebraska, photographs of the Dismal River, Government forestry reserve, 50 large colored photographic views of timbers and forests, 100 framed charts tinted to show the distribution of each tree in Nebraska and in the United States; also photographs of J. Sterling Morton, the founder of Arbor Day, and his home at Arbor Lodge.

The State Normal School at Peru was represented by a series of enlarged colored photographs and by the work of its art department.

The University of Nebraska was represented by colored enlarged photographs of its campus, buildings, and equipment; by a particularly creditable display by the art department; by original models and charts from the department of zoology and medicine; by large relief maps, geological maps and sections, crystal models, and published reports; by an elaborate set of photographs and drawings showing the laboratories and equipment of the electrical department, which also exhibited original apparatus, theses of students, and published reports; by photographs of the psychological laboratories; photographs and statistics of the University School of Music, with published reports and printed and manuscript music; by statistics from the English department, particularly the branch of debating, showing photographs of all contestants, statistics, and victories in the intercollegiate debates; awards from the funds established by the Hon. William Jennings Bryan, etc.; by books and published reports from the departments of botany, geology, zoology, pedagogy, electrical engineering, and psychology; by trophies and statistics of victories in athletics.

Union College, at Collegeview, represented a remarkable industrial and applied system of education, not only showing college work of standard grade, but every phase of practical work in the trades and agriculture, the care of the sick, and the economics and management of the household. This was ably illustrated by photographs, catalogues, and papers printed on the college press and bound in the college bindery. The work in relief maps was of special merit, ranging from crude free-hand work in paper by the first grade to that of the State geological survey and of the University of Nebraska.

The study of geography by the scrapbook method, a very successful method devised and used in the Omaha public schools, was presented for inspection in large bound portfolios, and attracted the notice and elicited the favorable comments of teachers. A new method of teaching crystallography developed in the State University was shown, by which blocks of plaster of Paris with axes of silk are used. By cutting and modifying these with reference to the axes the various forms are produced.

NEW JERSEY.

BY S. R. MORSE, DIRECTOR.

THE EXHIBIT.

The decision to make an educational exhibit from New Jersey at the world's greatest exposition was delayed until late in October, 1903. As the exposition was to be opened on May 1, 1904, this gave a scant allowance of time for the formulation of plans and the preparation, collection, selection, arrangement, ship-

ment, and installation of work. Notwithstanding this unfortunate delay, of the 35 States which made an educational exhibit New Jersey's was the first to be in place and ready for inspection.

As soon as the decision to make a display was reached all local school authorities were at once notified, but our circular (No. 3) outlining the plan of work was not printed and ready for distribution until November 20. The response to the circular was prompt, cordial, and very nearly general. The principal suggestions contained in it were as follows:

· Each county and city superintendent was made chairman of a committee of his own selection to take charge of the preparation of the work forwarded from the schools under his supervision.

Special committees, comprised of experts in each of the several lines of school work, were appointed to assist in the final selection of material to be forwarded to St. Louis.

In order to stimulate healthful rivalry, awaken a general interest in the State exhibit, and give the parents and friends of pupils an opportunity to see their work, a public exhibit of the work of each school was recommended before sending it to the county or city superintendent.

County and city exhibits were also suggested to be made before superintendents forwarded the work received by them to State headquarters. This afforded an excellent opportunity for comparing the work of different schools and gave each teacher an opportunity to see what was best. This local exhibit is the most interesting and valuable factor that can be associated with the preparation of the work for a world's exposition. Nothing is more effective in strengthening educational sentiment or proves more helpful in establishing the closer bond of sympathy so much needed between the home and the school than the local display, in which each parent has an opportunity to see the work of his own and his neighbor's children.

In addition to the preceding, circular No. 3 gave extended specific and general instructions for the preparation, classification, and mounting of school work. All kinds of paper needed for the final work of pupils and the cardboard required to mount it were furnished by the State.

The following special exhibits were solicited: Specimens of minerals correctly labeled and boxed ready to be set up, each label to state the name of the specimen, when and where found, and the name, age, and grade of the contributing pupil; mounted specimens of plants and leaves; homemade apparatus for physical and chemical experiments; text-books, monographs on special topics, and other literary productions prepared by teachers, principals, and superintendents engaged in public school work; photographs showing the architecture of school buildings, their class rooms, furniture, apparatus, and the personnel of teachers and pupils; also any special literary, scientific, mechanical, or artistic work of pupils.

In common with all other States, New Jersey exhibited copies of school law, annual reports, courses of study, catalogues, rules and regulations, and the various blank forms found necessary in modern school administration.

The New Jersey educational exhibit differed in some features from that of other States. It had the same wing cabinets that were designed and used exclusively by the New Jersey department of public instruction at Chicago in 1893, but for the display of books and various lines of work not readily shown upon the walls or in the cabinets, drawers instead of shelves were placed under the cabinets. These enabled the work to be put in convenient form for inspection and had the additional merit of keeping it clean.

Another feature entirely new and used for the first time at this exposition was the index key, of which the following is an explanation:

The exhibit was divided into sections lettered from A to M, inclusive, and these were subdivided into units numbered from 1 to 68, inclusive. Each unit consisted of a leaf cabinet with six drawers directly underneath. The units from 15 to 21, inclusive, were arranged to serve as an index to the entire public school exhibit. Unit No. 15, for instance, directed to first year's work, and unit No. 16 directed to second and fourth years' work, etc. In order to find the work from a particular school it was simply necessary, first, to find in one of the index cabinets the card containing work from the county or city in which said school is located. This card directed you to the section, to the unit, and to the volumes in which all the work of the school, except that placed upon the walls, could be found. Different lines of school work were bound in different colored volumes, as shown by index cards.

Other unique features of the New Jersey exhibit were as follows:

The manual-training work of each school was shown in connection with its academic. An exhibit, consisting of sketches prepared by pupils of the public schools, of historical events that have occurred in the State was accompanied by photographs of historical places and served to stimulate unusual interest in a most important line of investigation. The educational value of an exhibit of this character was duly appreciated, even by unprofessional sight-seers. A combined exhibit of music and art was exceptionally fine and attracted much attention. By means of systematic arrangement, a large amount of work was displayed within small compass. The work in the leaf cabinets was not shown in single sheets, but in the majority of cases from five to twenty sheets were fastened in a single space, so that the entire work of a class could be conveniently inspected.

The general arrangement of the work in the New Jersey educational booth was as follows:

Beginning at the left entrance, there came first that of the New Jersey normal and model schools, next that of the State Industrial School for Colored Youth, and then followed in regular order the general exhibit of primary, grammar, and high school work.

The State normal and model schools of Trenton furnished a complete exhibit of their work, filling six cases, the wall space above these cases, and a number of bound volumes. In preparation for the exhibit, the teachers of the various grades and departments of the schools were requested to select typical exercises from the regular work of the pupils and have these exercises copied by the pupils on uniform exhibition paper without criticism by the teachers, so that so far as the pupils were represented the work should be distinctly their own.

In the normal school the types chosen represented not only the efficiency of the pupil, but the plan of the work, or, rather, the method. For instance, a number of typical exercises in English would show the method of taking up the study of English with different grades of pupils, the subjects of English study, and their application to the various grades of pupil development.

In the model school the exercises exhibited typical academic work from each one of the subjects taught in the school and were so arranged as not only to show what was regarded by the authorities of the school as good work, but also to constitute an expression in practice of the theory of the normal. For instance, in the department of drawing there were specimens of constructive, representative, and decorative drawing and color work, and applications of designs in mechanical drawing, posters, pen and ink sketching, etc., all so applied as to meet the standards of practical use in the arts and crafts.

The work as a whole was so systematically arranged that a comprehensive

panoramic view of the school work of the State was clearly presented and the visitor furnished concrete proof of the progressiveness of the Garden State and the excellence of its public school system.

NEW MEXICO.

BY M. W. PORTERFIELD, COMMISSIONER.

THE EXHIBIT.

New Mexico's educational institutions were represented at the Louisiana Purchase Exposition by excellent exhibits from the normal school at Silver City, the Normal University at Las Vegas, the University of New Mexico at Albuquerque, the College of Agriculture and Mechanic Arts at Mesilla Park, the School of Mines at Socorro, the Military Institute at Roswell, and from a large number of graded schools and country schools, fully demonstrating the educational facilities of the Territory.

It must be said for the educators who had the preparation of this work in charge that the brief time allotted to them was well employed, as the late date at which the appropriation was available left them only the few weeks remaining between the 1st of January, 1904, and the opening of the exposition.

At a meeting of the educational association, convened at the capitol building at Santa Fe on December 27, 1903, M. W. Porterfield, superintendent of exhibits for New Mexico, appeared before the association and addressed the educators on the subject of providing a creditable exhibit of the educational facilities of New Mexico at the exposition, asking the association to appoint a committee to aid him in outlining a plan which would insure uniform and comprehensive exhibits from all the schools of the Territory. The committee appointed consisted of Dr. C. M. Light, president of the Silver City Normal School; Prof. A. B. Stroup, principal of the Albuquerque High School, and Prof. J. A. Wood, superintendent of the Santa Fe schools, who presented to the association a detailed working plan, which was adopted, and the principals of all schools of the Territory and the presidents of all the higher institutions were appointed to cooperate in the work of preparing the exhibits.

It was agreed that cabinets and wing frames of suitable design would be used, and that the New Mexico commission would furnish to each school as many of these as it could utilize. The cards to be used in the wing frames were shipped direct to each school, and the school work attached to these according to a prescribed rule, ready to be placed in the frames. In this condition they were shipped to St. Louis, where the cabinets and wing frames were ready to receive them.

The work was uniformly prepared in the manner outlined, and the cards numbered, so that when they reached St. Louis everything was in systematic order and readily fitted into the cabinets. In addition to the work suited for installation in the wing frames were specimens from the manual training departments, biological departments, kindergarten work, raffia work, map work, and photographs of the school buildings. These were exhibited on the walls of the booth and in upright show cases along the front of the aisle, making in all a very neat and attractive exhibit.

NEW YORK.

BY DE LANCY M. ELLIS, DIRECTOR.

ORGANIZATION.

The administration of the school system of the State of New York has been more complex than that of any other State in the Union. This was owing to the fact that while the sentiment toward public education is in no State more generous, yet the administration of educational affairs was highly centralized in two departments. The State department of public instruction and the University of the State of New York, the two educational departments under which the schools were formerly administered, were merged by act of the legislature of 1904, and now the controlling power is designated as the education department of the State of New York, consisting of two coordinate branches—the board of regents (the legislative branch) and the commissioner of education (the executive).

The members of the board of regents, numbering eleven, are elected by the legislature on joint ballot, and serve for a term of eleven years, one member retiring each year. The board exercises the powers of the corporation known as the University of the State of New York, with which powers it has been charged since the granting of the charter by the legislature in 1784, and in addition thereto exercises advisory powers on State educational policies as related to elementary and secondary schools, as well as the higher institutions. The members of the board receive no compensation, but are paid actual expenses while in attendance upon meetings of the board.

The first commissioner of education was elected by the legislature for a term of six years, and his successors are to be appointed by the board of regents and serve during its pleasure. He is the executive officer of the board and has general and administrative supervision of all educational interests in the State. He administers the consolidated school law, the university law, and the general statutes of the State relating to education, and has power to create such departments as in his judgment are necessary and to appoint deputies and heads of departments, subject to the approval of the board. The heads of the several divisions appoint, subject to the approval of the commissioner, the subordinates in their respective divisions. All appropriations of public money made in support of the common school system and all appropriations in aid of secondary education are certified by the commissioner and paid by the State treasurer on the warrant of the comptroller. The commissioner receives a salary of \$7,500 per annum and \$1,500 per annum in lieu of personal expenses. There are three assistant commissioners, appointed on the nomination of the commissioner and the approval of the board, each receiving \$5,000 per annum. The first assistant commissioner is in charge of universities, colleges, professional and technical schools, and of the execution of the laws concerning the professions, also the relations and chartering of institutions. The second assistant has charge of high schools and academies and of the training of teachers therefor, including the oversight of the State Normal College. The third assistant has charge of the elementary schools and of the training of teachers therefor, including normal schools, training classes, and teachers' institutes. It devolves on each assistant to guide the work and uplift the institutions of his class. In the absence of the commissioner, the assistant commissioners in their numerical order act in his stead.

The administrative and clerical work of the department is classified under divisions, as follows: Accounts, compulsory attendance, examinations, inspections, law, records, statistics. The heads of divisions are called "chiefs," unless otherwise indicated, and are appointed on the nomination of the commissioner and confirmation by the board. Such work as is carried on directly by the department, rather than through schools, is included under libraries and home education, and State science work.

The head of the libraries and home education division is called "director," and the operations and work of this division are under the immediate supervision of the commissioner. The division includes the State library, the Library School, the administration or aid of town, school, and other libraries, including the supervision of all agencies for promoting study and culture outside of teaching institutions.

The head of the science work division is called "director of science work" and of the State museum. The work of this division is likewise under the commissioner's immediate supervision. It includes the work of the State geologist, paleontologist, entomologist, and botanist, and the charge of the State scientific collections.

The head of the division of accounts is called the "cashier," who is required to give a bond approved by the comptroller for the proper discharge of his duties. In addition to keeping all financial accounts he is charged with the management of the business affairs of the department, and with the care and proper expenditure of all moneys received.

The administration of the compulsory education law is lodged in the compulsory attendance division.

The examinations division includes the entire public examination system of the State, comprising the examinations of pupils in the schools with reference to their advancement, the examination of all candidates for certificates as teachers, and the examination of candidates for admission to the professions.

The inspections division contains twelve inspectors, and includes the inspection of the elementary, secondary, and higher institutions of the State as to methods and efficiency of instruction, equipment, sanitary conditions, etc.

The law division answers all inquiries made informally as to the provisions and meaning of the school laws, and has charge of all appeals from the acts of local school officials which are taken on formal pleadings to the commissioner, and on which his decision is final and can not be called in question in the courts. This distinctive feature of the New York system has been in operation for three-quarters of a century and provides a court for settling school controversies speedily, inexpensively, and conclusively.

The records division has charge of all permanent records of the department, and all data bearing on the history of education in the State.

The statistics division compiles the annual reports from the elementary, secondary, and higher institutions, and apportions all school moneys.

Under the professional laws of the State, boards of examiners are provided in medicine, dentistry, veterinary medicine, certified public accountants, and nurses, in connection with the work of the department.

The annual apportionment of school moneys affects every public school in the State of elementary and secondary grade, and is made with special reference to aiding the weak rural districts. These moneys are derived from three sources—the free school fund, raised by taxation, and so much of the income of the United States deposit fund, and so much of the income of the common school fund as may be appropriated, it being provided by statute that all moneys so apportioned, except the library moneys, shall be applied exclusively to the payment of teachers' wages. In apportioning the school moneys the commissioner

is required, first, to set aside a sum to pay the salaries of school commissioners, who are local officers in rural districts, chosen by popular vote and serving for a term of three years, \$1,000 per annum each; then such sum for library moneys as shall be appropriated for that purpose. The balance is apportioned as follows: To each city, \$800; to each village and union school district with a population of 5,000 or more, which employs a superintendent of schools devoting his entire time to supervision, \$800; for contingent fund, not more than \$10,000; to each school district having an assessed valuation of \$40,000 or less, and to each Indian reservation for each teacher, a quota of \$150, and to each of the remaining districts and to each of the cities in the State, \$125, this apportionment being known as a "district quota;" to each district or city, for each additional qualified teacher, \$100, this apportionment being known as a "teacher's quota." (In order to receive a "teacher's quota" a district must present verified evidence that a duly licensed teacher has taught therein at least one hundred and sixty days in the school year.) The balance is apportioned to the several counties on the basis of population. The apportionment is certified to the county clerk, the county treasurer, school commissioners, and city treasurer, or chamberlain in every county in the State. The school commissioners of each county thereupon meet and reapportion the money in accordance with the instructions of the commissioner of education, dividing the amount which has been apportioned to each county on the basis of population among the several districts therein on the basis of aggregate attendance. Having made their apportionment, the school commissioners certify the same to the treasurer of the county and the commissioner of education, and to the supervisor of each town the amount of school moneys apportioned to his town, the supervisor being required to give his bond for at least double the amount of school moneys so apportioned for the faithful disbursement, safe-keeping, and accounting for such moneys and all other school moneys that may come into his hands from any other source.

No person can teach in the public schools of the State without a license, and the State maintains an elaborate system for the training and certification of teachers, as follows: First, a normal school system, comprising 1 normal college and 11 normal schools, the first named being a degree-conferring institution and all of them, upon the completion of one of the prescribed courses of study, issuing certificates to teach for life in the State; second, training schools for the preparation of teachers in the various cities of the State, carried on under State supervision and with State aid, with a course covering two years, upon completion of which course a certificate to teach is issued for three years, renewable for ten years; third, training classes in the high schools and union schools of rural districts of the State, maintained under State supervision and with State aid, the course of study being one year, upon the completion of which a certificate is issued to teach for three years, renewable for five years; fourth, a graded system of teachers' examinations for the rural districts, known as the "uniform" examinations, so graded that applicants for the profession must begin at the lower grade, and in order to remain in the profession must gradually earn the certificates of the higher grades. The certificates are valid for different lengths of time, depending upon the scope of the examination. These examinations are prepared by the staff of the education department and conducted by local school authorities throughout the State, and papers are returned for correction and rating in the State department of education, which issues the certificates.

A system of teachers' institutes is maintained throughout the State by a competent corps of instructors, an institute being held in every commissioner district in the State each year lasting one week. The system is being gradually extended to the cities, wherein, however, at this time the holding of institutes is optional, whereas in the rural districts it is obligatory. Lectures are given

on pedagogical subjects. Attendance upon the part of teachers is obligatory, the penalty for failure to attend without valid reasons being the revocation of the teacher's certificate. The attendance upon teachers' institutes is counted in the required number of days to be taught, and the law provides for the payment of teachers' wages for institute week.

THE EXHIBIT.

The educational exhibit of the State of New York was prepared with the hearty cooperation of all of the educational interests of the State. The movement was inaugurated at a meeting of the State Teachers' Association held at Saratoga in July, 1902, at which a resolution was offered inviting the various educational associations in the State to cooperate with the above association in arousing interest and obtaining funds for making an exhibit commensurate with the State's educational importance at the St. Louis Exposition. An immediate response was received from the administrative departments of the State and from each of 10 powerful educational associations, who each sent a representative to a so-called "conference committee." This committee succeeded in obtaining the requisite funds from the commission appointed by the governor to represent the State at St. Louis and the appointment of a director for the exhibit. The matter was presented at every educational meeting of importance during the year 1903, and that fact, in conjunction with the circulars sent throughout the State, aroused a widespread interest in the project. The exhibit was collected, systematically arranged, and mounted in the office of the director at Rochester, N. Y., the entire expense of its preparation and transportation being borne by the State, with the exception of the binding of written work and small incidental expenses, which were borne by local school authorities. Full instructions were forwarded to local authorities as to the preparation of work, amount of material desired, and the proposed plan of arrangement. To the latter, which is described below, objection was raised on the part of one or two cities, but it was generally considered that while the arrangement made no concession to local pride, it was the wisest arrangement to follow in an exposition of international scope. This arrangement was briefly as follows:

That, save the city of New York, which had been assigned separate space by the exposition authorities, and which had made an appropriation more than half as large as that made for the entire State exhibit, no city should be permitted to make a distinctive exhibit, but that all should be merged in a State exhibit, which should indicate clearly what the State as a whole is doing in education. Having decided upon this method, it remained to decide whether the work should be arranged by grades or subjects. The conference committee, which, upon the appointment of a director, took the name of "Advisory committee," recommended that the grammar school work should be arranged by grades; in other words, that all the work of the State in a single grade should be installed together, thus making it possible for a grade teacher to compare her own work readily with that of New York's and to profit by the comparison, no matter in whose favor it might be. In the high school section all the work was to be installed by subjects and classed under various departments, such as science, classics, mathematics, etc., for the benefit of instructors in charge of departments. The compliments which have been bestowed upon the arrangement, and the readiness with which all visitors have found the work in which they were particularly interested, have demonstrated beyond doubt the wisdom of the committee in pursuing the course above outlined, and, in the opinion of

the writer, it is clearly the most satisfactory arrangement of work in an exposition of the scope of the present one.

The total appropriation for the exhibit was \$20,000. This amount was expended approximately as follows:

Installation; booth, wall cabinets, furniture, floor coverings, etc-----	\$6, 000
Salaries of director and assistants, and maintenance at St. Louis-----	7, 250
Freight, express, cartage, telegrams, etc-----	1, 800
Material used in preparation, etc-----	3, 000
Traveling expenses-----	1, 200
Printing, etc-----	550
Expenses of advisory committee-----	200
Total-----	20, 000

In an educational exhibit, probably more than in any other, the necessity of personal explanation to supplement the work exhibited is necessary. Throughout the summer there were present trained attendants to explain the work exhibited and to give full details of systems and institutions from which the exhibit material had been sent. These attendants spoke the principal foreign languages, which in itself was of much advantage to foreigners, greatly aiding them in grasping the ideas set forth and the methods exemplified.

There were many features of widespread interest, one of which was a series of 35 statistical charts bearing upon educational activities generally and setting forth startling facts as to the wonderful growth of New York's educational system. Another was an educational map showing the location, grade, construction, and normal capacity of every institution of learning within the borders of the State. Various methods of instruction which are peculiar to certain cities or localities were fully set forth; e. g., the system of individual instruction as carried on in Batavia; the complete system of free kindergartens and the progressive methods in vogue therein in Albany; manual training throughout the grades as carried on in Jamestown; high school athletics, as exemplified at Ithaca; physical training as carried on in Syracuse. An exhibit from the State School of Clay Working and Ceramics at Alfred, which is the only school of its kind receiving State aid, was an especial feature.

The whole aim of those in charge of the exhibit was to show the work in education which is being done in the Empire State in all its forms and phases, and therefore the exhibit was not confined to the work of the public schools, as was quite generally done. Space was given to typical private institutions throughout the State to show the assistance which they are giving to the cause of education in general. In fine, there were interesting exhibits in place, not only from 24 cities and numerous villages both in elementary and high school work, but also the most complete and representative exhibit of rural school work that has ever been gathered in the State of New York; a composite exhibit of the normal school work of the State; a collective exhibit from the training schools and classes; concise displays from several of the smaller universities (the larger ones, such as Cornell and Columbia, having been granted separate space by the exposition authorities); interesting exhibits from technical and trade schools and business colleges; a composite exhibit from the Indian schools of the State; an interesting exhibit from the schools for defectives, including the blind and the deaf and dumb, and an alcove devoted to the work of summer schools and extension courses, as best exemplified at Chautauqua. The exhibit made by the education department of the State in visual instruction, as carried on by lantern slides, to aid in the teaching of geography, history, and kindred subjects, received

hearty commendation from educators generally, but particularly from foreign visitors. Nowhere else in the world is it carried on with the same careful attention to detail, nor is the same perfection of slide making reached, as in the State of New York.

The exhibit from first to last demonstrated beyond peradventure the beneficial results accruing from a strongly centralized, powerful, and at the same time most liberal administration of educational interests. Under the fostering care and conservative guidance of the governing authority, standards have been steadily raised. The qualifications of instructors and the compensation of teachers have been constantly advanced. School buildings have been enlarged and improved with such rapidity that statistics show, in the year 1903, the value of buildings and sites in the State to be double what it was in 1893, a decade ago.

Under the impetus given by the State's policy of duplicating moneys raised locally for libraries and apparatus, school equipment is at the highest point of efficiency. A compulsory education law has been uniformly enforced, both in city and country, with a minimum of friction. In fact, the close relationship existing between the central authority and all educational activities has clearly made for superiority of educational work.

NORTH DAKOTA.

BY W. L. STOCKWELL, STATE SUPERINTENDENT OF SCHOOLS.

THE EXHIBIT.

North Dakota's educational exhibit at the Louisiana Purchase Exposition gave a very excellent idea of the educational progress of the State. While not elaborate, a careful examination of the same would disclose the fact that she is not necessarily behind many of the older States in the character and quality of her school work.

A committee was appointed by the State Educational Association consisting of the following members: President J. H. Worst, of the agricultural college; President Geo. A. McFarland, of the State normal school, Valley City; Supt. Mattie M. Davis, Fargo; Miss Mazie Clemens, Jamestown; Supt. W. E. Hoover, Park River, and State Supt. W. L. Stockwell. This committee was empowered by our State commissioner, Hon. David Bartlett, to undertake the preparation of the exhibit. Immediately after the appointment of this committee circulars were sent out to the educators of the State, calling their attention to the desires of the committee and asking their cooperation. The plan of the committee was to have an exhibit which would represent intelligently the work of the schools, from the rural schools to the university, including every department of education. The exhibit was not intended to be an exhibit of individual schools so much as a representation of the work of the State as a whole. In order that a more definite idea might be given of the work desired by the committee a preliminary exhibit was held during the State Educational Association of 1903 at Grand Forks. A large number of rural and graded schools sent exhibits, and the committee was enabled to call attention to the features which it particularly desired to have represented.

The work of collecting the exhibit was seriously handicapped by the lack of

funds with which to employ a person to take charge of the preparation and collection of the exhibit. As a result each school sent in its exhibit to Fargo, and, after the exhibits were all in, the committee had the task of going over the same and selecting those features which would more particularly represent the work of the State.

The booth assigned to North Dakota was of necessity small, having not much above 1,500 square feet of floor space. The plan of arrangement might be considered as an open booth, with cases containing the mounted exhibits placed around the outer margin, leaving the interior of the booth for the placing of show cases displaying the industrial features of the exhibit.

The institutions of higher learning were all represented. The State university, the agricultural college, the State normal schools at Valley City and Mayville, the manual training school, the school for the deaf, the school of science, the Fargo College (Congregational), and the Red River Valley University (Methodist), furnished comprehensive exhibits. All of the large graded schools, including those of Fargo, Grand Forks, Grafton, Jamestown, Valley City, Devils Lake, Park River, Larimore, Hillsboro, Wahpeton, Lisbon, Cando, Langdon, Carrington, and many others were represented. The rural schools of Walsh, Cass, Barnes, Sargent, Wells, Pierce, and Pembina counties were represented. In brief, all the phases of educational work of North Dakota were fairly exhibited.

The department of public instruction sent an exhibit, including charts showing statistics with reference to education, maps showing the locations of all schools in the various counties, exhibits of teachers' examinations, together with various publications, such as courses of study, school laws, high-school manuals, and copies of the various blanks which are used by the department of public instruction.

Another prominent feature of the exhibit was photographs. In this the committee endeavored to follow out the idea suggested by the head of the educational exhibit. The photographs represented buildings, interiors, groups of students at work in laboratories, groups of the faculties of the higher institutions; in fact, everything which could be represented by a photograph. This feature of the exhibit was one which enabled the visitor to form a very comprehensive idea of the equipment of the educational institutions in North Dakota, as well as a very excellent idea of the type of men and women who are found in our institutions as instructors, and of the class of young people who are being instructed in our schools.

Art work, as done in our schools, was very well represented. This included work in charcoal, crayon, pen and ink, and water color. The industrial features of the exhibit were from the engineering department of the university, the agricultural college, and the manual training school through specimens of work in wood and iron and mechanical drawing of all kinds. The industrial work from the graded schools was shown by specimens of basketry, mat weaving, and other work of a similar character. The actual work of the class room was shown through the medium of bound volumes of school work.

The lack of funds handicapped the committee in the inauguration of many features which gave a very decided character to many of the other exhibits. The committee having the exhibit in charge, however, feels that the display was in every way creditable, and gave to the visitors an excellent idea of the educational progress of our State, showing, as it did, that North Dakota has the same educational tendencies and is making the same educational progress as are found in practically every other Commonwealth of our country.

PENNSYLVANIA.

BY NATHAN C. SCHAEFFER.

THE SCHOOL SYSTEM.

The law providing for the establishment of a system of common schools was enacted in 1834. It was amended in 1836. By its provisions every township, borough, and city was made a school district under the management of a board of directors or controllers. In the townships and smaller boroughs the number of directors is six. In most of the larger boroughs and the cities the number varies according to the number of wards into which the municipality has been divided.

The power to fix the amount of tax for school purposes is vested in the school board in all cities except Philadelphia, where the levy is made by councils. The maximum annual tax for school maintenance is 13 mills, but the law allows an additional tax for building purposes, which must in no case exceed the amount levied for school maintenance. A tax not exceeding 1 mill may be assessed for library purposes.

School boards are vested with power to select school sites, build schoolhouses, grade the schools, employ the teachers, adopt the text-books and the courses of study, furnish free text-books and supplies, and organize in townships as a board of health during the prevalence of epidemics or contagious diseases. They are further charged with the duty of enforcing the law which makes attendance at school compulsory for all persons between the ages of 8 and 13, and of others between 13 and 16 who can not read and write the English language intelligently or are not regularly engaged in some useful employment or service.

Orthography, reading, writing, English grammar, geography, arithmetic, history of the United States, and physiology and hygiene must be taught in every district. Provision is made for such other branches as the board of directors may see fit to include in the curriculum. In addition to these branches the teachers must also have certificates of scholarship in elementary algebra and civil government; and no teacher is permitted to give instruction in branches not enumerated on his or her certificate.

The act creating the office of county superintendent was passed in 1854. Subsequently laws were enacted permitting cities, boroughs, and townships of 5,000 inhabitants to elect separate superintendents. The salaries of the county superintendents are paid out of a legislative appropriation, while those of the other superintendents are paid out of the treasuries of the school districts which elect them.

Before a school superintendent can be commissioned, it must be evident to the State superintendent that he possesses the literary and professional qualifications required by law. The term of office is three years. The election of the county superintendent is held at the county seat on the first Tuesday of May by a convention of school directors. No other State, county, or municipal election is held at the same time.

The system of holding annual teachers' institutes puts the whole responsibility for the success of the institute upon the superintendent, whose visits and examinations have made him familiar with the needs of his teachers, gives him funds adequate for securing the best available talent in the whole country, provides for the closing of the schools during the institute week, and gives the teachers the same compensation as if they were teaching.

The act providing for the establishment of State normal schools was passed in 1857. During the last year the thirteen State normal schools received \$130,000 for maintenance and tuition, at the rate of \$1.50 per week for every student willing to sign a pledge to teach two years in the public schools. The aggregate value of the buildings and equipment of these schools exceeds \$4,000,000. The course of study covers three years.

The school department was made a separate department of the State government in the year 1857. Before that time the secretary of the Commonwealth was ex officio superintendent of common schools. The State superintendent is appointed for a term of four years, by the advice and consent of the senate.

For many years there was no definite high school policy. Cities and boroughs, indeed, organized and maintained efficient high schools, but it was only in 1895 that a general high school act was passed. In 1901 the policy of aiding township high schools by State appropriation was inaugurated. During the school year 1903-4, 163 township high schools received aid in this way, and the number is rapidly increasing. The courses of study cover from two to four years, according to the needs and resources of the community in which the high school is located. The total number of high schools in the State is 630.

The growth of the system has exceeded the most sanguine expectations of its founders. According to the statistical report for the school year ending June 1, 1903, it gave employment to 31,449 teachers, and furnished school facilities to 1,193,669 pupils. The total expenditure for that year was \$24,354,888.23. The estimated value of the school property was \$68,523,701.44.

THE EXHIBIT.

The educational exhibit of Pennsylvania presents the ordinary work of many schools in their different grades, with courses of study, etc. The kindergarten and manual training schools are particularly well represented. Photographs are, of course, a prominent feature of the display. A fine oil painting of Thaddeus Stevens, loaned by the Lancaster school board, is prominent upon the wall at one end of the section and properly challenges the attention of the visitor. It is here to commemorate the great fact in the school history of Pennsylvania that, in 1835, he prevented the repeal of the law for the establishment of common schools which had been enacted the year before, mainly through the efforts of another son of New England, Hon. Samuel Breck. Over the pillared entrances on each of the inner sides of the inclosure there is a splendid showing of historic portraits loaned by the department of public instruction; on one side Samuel Breck, Thomas H. Burrowes, Henry L. Diffenbach, and Charles R. Coburn, and on the other, facing these, J. P. Wickersham, Elnathan Elisha Higbee, David J. Waller, and Nathan C. Schaeffer. These lifelike portraits, heavily framed in gold, in pleasing contrast with the dark background upon which they hang, occupy a commanding position and attract much attention. The committee on education of the Louisiana Purchase Exposition Commission, in June, 1903, appointed as director of education for Pennsylvania at the exposition Supt. Addison L. Jones, of Westchester, who at once formulated plans for the collection and installation of an educational exhibit from the public schools. The plans were submitted to and accepted by Col. James H. Lambert, executive officer of the commission, and the committee on education. A circular letter containing addresses by State Supt. Nathan C. Schaeffer and Colonel Lambert to school officers and teachers, and rules for the preparation of exhibits, was prepared and sent out to all superintendents and other school officers early in September, 1903.

At a meeting of the normal school principals and the directors at Harrisburg

it was decided that the normal schools should make a collective exhibit. A committee in each school was appointed and their work was well performed. This is the first world's fair in which all of the normal schools have been represented.

Nearly all of the material for the exhibit was collected in Westchester by March 1, 1904. To arrange the matter and install it at St. Louis two assistants to Superintendent Jones were appointed, Alicia M. Zierden, a graduate of Bucknell University and a teacher in the schools of Dubois, was made first assistant. Miss Zierden had done valuable work in the department of education in the expositions at Buffalo and Charleston. Prof. T. L. Gibson, formerly superintendent of Cambria County, and more recently an institute instructor, assisted in the preparation and installation of the material.

Supt. Edward Brooks, of Philadelphia, began early to make preparations for the best city exhibit the schools could prepare. He appointed committees in the different departments of the school system. The commission gave one-fourth of the entire block allotted to the State to the schools of this city. The space was small, but the display is greatly admired.

The Philadelphia exhibit.—The kindergarten exhibit was intended to represent the progress of the kindergarten idea up to the present time. It consisted of work of children in public kindergartens, representing a sequence of a year's work as arranged in the programme authorized by the director of kindergartens; also a series of papers explaining the principles and methods of Froebel's philosophy as applied in the gifts, accompanied by drawings showing their application in the practical work with the children. In detail it represented the mathematical analysis of the gift work in sewing and original expressions of the children on this basis; original work in weaving, sequences in paper folding, paper cutting, original illustrations of kindergarten stories in drawing, and "color work" from models with brush and pencil. A typical programme of a month's work in the kindergarten contained an outline of a morning talk, games, gift, and occupation exercises, accompanied with drawings illustrating the details.

The exhibit of the elementary schools consisted of papers on language, arithmetic, geography, history and civics, physiology and hygiene, together with work in drawing and sewing, kindergarten work, etc.

The papers on language showed the successful application of the idea that in the correlation of studies language should be made the central study, and that history and literature on the one hand, and "nature study" on the other hand, should be grouped around this center. The work is characterized by another educational maxim placed prominently on our exhibit, "Language is the instrument of thought and the medium of expression." The influence of these two principles was manifest in the language work of our exhibit.

The exhibit in arithmetic was characterized, first, by the fact that the much-lauded Grube system had been discarded for a more natural and logical system called the "normal system," and, second, by the prevalence of that analytic method of thought and operation which has done so much to revolutionize instruction in arithmetic in this country. The work ranged from the elementary processes of the first grade to mensuration and the elements of algebra in the eighth grade. The business applications of arithmetic were made prominent in the exercises.

The papers in geography showed the coordination of political and physical geography in the treatment of each individual country or State, and the influence of physical conditions on plant and animal life and upon the occupations, characteristics, and the welfare of mankind. In case of the United States

these influences were correlated with the history of the country, especially in respect to the State of Pennsylvania.

The work in physiology and hygiene represented the general character of class-room work in the Philadelphia schools. The work included, first, a description of the body as a whole; second, the bony framework; third, the muscular system; fourth, the digestive system; fifth, the blood and its circulation; sixth, the lungs and respiration; seventh, the skin and its functions; eighth, the nervous system and the special senses.

The papers on history indicated the methods and purpose of teaching this branch in the public schools. Those in the primary grades related to some prominent event in our country's history or to the deeds of its great men. The main object of the teaching, in these as well as in the other grades, is to cultivate a love for the study and a desire to learn more of our country's history, rather than to fix in the memory a certain number of facts or dates. Biography is made the basis of historical study in these grades. In the grammar grades more attention is given to events and those larger movements that indicate the progress of the nation.

The sewing exhibit of the pupils, placed in a large glass case at the entrance to the Philadelphia section, consisted of specimens of plain and fancy sewing and dressmaking by the pupils of the elementary schools, ranging from 8 to 14 years. The exhibit included lace handkerchiefs, fancy underwear, beautiful and dainty dresses, etc.

The exhibit in drawing consisted of 80 mounts, 22 by 28 inches, containing an average of 10 drawings to each mount, part of which were displayed openly, the remainder being contained in two wall cabinets. In addition there were 8 bound volumes containing over 1,200 drawings. The drawings exhibited were selected from the work of all grades, and consisted of drawings of leaves, sprays, plants, common objects, etc., executed in colored chalks and crayons in the lowest grades, and in pencil, pen and ink, and water colors in the highest grades.

The exhibit of the Public Industrial Art School consisted of: (1) Drawings and designs in monochrome and colors, water color sketches, and charcoal drawings; (2) clay models, conventional forms and designs, nature forms in low relief and in the round; (3) wood carvings; (4) photographs of children at work in the various class rooms.

The pupils of the school are drawn from the fifth to the eighth year of the public schools, and attend one session of two hours each week in the afternoon.

The Central Manual Training School (William A. Sayre, A. M., principal) and the Northeast Manual Training School (Dr. Andrew J. Morrison, principal) united in the exhibit of manual work. In the manual work of the exhibit, which is a distinctive feature of these schools, each exercise involves a mechanical principle, and the chief object of the instruction is the development of this principle rather than a finished piece of work.

The aim is to teach the pupil to express his thought in a concrete form with the least waste of time and material and in accordance with the most approved methods.

Principles involved in the exercises are explained, and the elementary stages of the work at the bench, the forge, or the machine are gone through with by the instructors. Free-hand blackboard sketches are freely used. Mechanical shapes and units are designed to familiarize the student with types and methods of construction.

The exhibit of the Central High School of Philadelphia is designed to give to those interested in public education a fairly satisfactory conception of the

plant itself, its history and development, its methods, and the part it plays in the civic, economic, and literary life of the city of whose educational system it forms the apex.

The plant itself—the building and equipment, confessedly the largest and most complete in the United States—is illustrated by a series of photographs exhibiting every detail, exterior and interior, class rooms, laboratories, and the magnificently equipped observatory. The various departmental exhibits show well the work done in the several lines of instruction which they represent.

As a school is to be judged only by its results and effects upon the community, the intellectual activities and achievements of its body of alumni are represented in some degree by the large library of works which have proceeded from their pens. It is enough to say that many of the greatest names in the literature and in the political, scientific, and professional life of our entire country are there represented.

In the exhibit of the Philadelphia Normal School every department of work is represented. A careful study of the 64 pages of its leaf catalogue and of its bound volumes, physical apparatus, and manual work will give a good idea not only of the aim of the school, but also of the educational tasks accomplished. Each department tells its own story by picture and text, but besides this, by a well-devised scheme of graphics, the number of hours devoted to each subject, the cost and running expenses of the school, and other valuable information may be obtained at a glance. Few normal schools contain such finely equipped laboratories, and these, together with the large and well-arranged class rooms, are shown by many photographs. All departments present a carefully arranged course of study. In some departments, notably literature, this, from the nature of the case, is the only exhibit. In many cases the course of study is made clear by notebooks, papers, maps, and other illustrative material, the work of the students.

Other exhibits.—The exhibit of Pennsylvania, so far as the public schools outside of Philadelphia are concerned, is composite. The best work of a grade is put together, so that the State is the unit of the exhibit rather than the school district. The work of all the kindergartens appears together, likewise that of the first grade, and so on through the grades. The high school and normal school products have been arranged by subjects, the papers from each branch appearing in a cabinet. Where there is sufficient work from a district, it is installed together, always with the name of city or district plainly marked and the name of the child on every article contributed.

The display is made on the inside walls of the booth, in leaf cabinets, base stands, and special show cases, and is classified under the heads of work from ungraded and graded rural schools, graded city schools, manual training, normal, and special schools. In portfolios and on the walls there are about 3,000 photographs of school buildings, interiors with children at work and at play; manual classes at sewing, basketry, weaving, in the shops, and in the gardens; plans and drawings in full of model rural school buildings; evolution of the school-house, showing the first log building and its successors until the modern school structure is reached; noted places and buildings in Pennsylvania history.

Most of the written work and some drawings from the respective grades are nicely bound in cloth, each subject by itself, labeled with the branch and frequently with the district. In nearly all the volumes are found teachers' statements, describing in full the method of teaching, with other information necessary to a full understanding of the work and its value in a system of education. There are about 900 volumes and portfolios.

There are series of charts showing graphically the growth and extent of high-school instruction, teachers' tenure of office and salaries; progress and extent

of evening schools—elementary, manual, and high; the origin, value, and results of township high schools; the history, courses, and to some extent the work of the normal schools; the extent, educational necessity, and practical use of school libraries. There are also charts showing at a glance the status of nearly all lines of educational advancement, as well as forming the basis of work for the student who desires to study pedagogy and education. By means of the leaf cabinet a series of 33 charts is placed in a single case.

The exhibit from manual schools is varied and full, including work from manual-training classes in wood and iron, weaving and basketry, domestic science, and sewing. This work is much admired, and, on account of its excellence and arrangement, attracts an almost continuous line of visitors. As in all other parts of the exhibit, the work is arranged by grades, and the name of the maker appears on every article.

The normal schools of the State have about 300 photographs of buildings, interiors, and students. They have much work showing methods in teaching, products from the training classes in science, art, language, reading, and pedagogy. Some of the schools also have excellent work from their model departments, showing plans by which the senior classes get their practice in teaching. A set of books, of which normal-school men are the authors, fills several shelves in the booth.

THE PHILIPPINES.

BY A. R. HAGER, CHIEF OF THE DEPARTMENT OF EDUCATION, PHILIPPINE EXPOSITION BOARD.

THE EXHIBIT.

The exhibit from the schools of the Philippines was housed in the largest building of the Philippine exposition. While this was in one way a disadvantage, since it was thus dissociated from the educational exhibits of other countries, yet it was desirable that it should be located so as to form a part of the complete picture of the Philippines, and it was particularly desirable because of the larger amount of space thus available.

The educational building was a reduced copy of the Manila Cathedral, and near this was the bamboo and nipa structure that was an exact reproduction of a Philippine schoolhouse, even to the windows of pearl shell. In addition to the contents of these two, the building devoted to "Commerce" was an educational exhibit, as it was a replica of the laboratory building of the Philippine Normal School at Manila.

The area of the Philippines is approximately equal to that of the Hawaiian Islands, plus Porto Rico, plus the State of New York, and all of New England, with 2,000 square miles left over. In all this area there are less than 150 miles of railroad, and most wagon roads do not deserve the name. The difficulty of collecting materials for an educational exhibit will therefore be understood. The principal towns are, however, on the coast, so that a large part of the traffic is by water.

The work of preparing and collecting the educational exhibit was begun in May, 1903. Circulars were sent to all American teachers giving an outline of the plan to be followed. These were read and explained to the Filipino teachers, and the result was an enthusiastic response. Uniform paper for written exhibits and other supplies were sent to all Government and private schools

requesting them, and the Government and private boats carried exhibit materials gratis. The free use of Government telegraph lines was also granted. In spite of all efforts, however, the difficulties were in certain cases so great that supplies sent to some school divisions in June had not reached them in December on the final date for receiving exhibit material at Manila. Many schools in the neighborhood of Manila were visited by the writer while exhibits were being prepared.

The work of preparing exhibits was in charge of the teachers, the direction of the work in each province being under the division superintendent. Most of these superintendents and a large proportion of the teachers took an active interest, the result being that the collection of school work included specimens from nearly all of the 36 school divisions.

The larger part of the exhibit naturally consisted of work of the primary schools, since that has been the principal work of the bureau of education during the four years of active work. At the present time, of the 2,286 Government schools 2,233 are primary, and they contributed fully 90 per cent of the 8,000 exhibits shown. These primary schools are all supported by the municipalities in which they are located.

There is a growing demand for intermediate instruction as pupils graduate from the primary grades, and there are now 50 Government schools of intermediate and secondary grade, at least one of which is supported by each school division.

The insular government maintains three special schools in Manila—the Philippine Normal School, the Philippine Nautical School, and the Philippine School of Arts and Trades. The first named is training Filipino teachers, and has at present an attendance of about 600 students. It is well equipped, and students receive pedagogic training in the common branches, in which they also gain actual experience in training classes with critic teachers. The normal students are taught botany and physics by the laboratory method, for which well-equipped laboratories are provided.

The Nautical School has been developed from a school founded by the Spanish before the American occupation. When first reopened by the insular government it was in charge of a naval officer, and many of the Spanish instructors of the old school were retained, but now all of the instructors but one are Americans, and, as is true of all the schools so far mentioned, all instruction is in English. Both the Normal and Nautical schools sent comprehensive exhibits illustrative of their work.

The School of Arts and Trades made a good exhibit of students' work in drawing. Other departments are maintained in carpentry, plumbing, machine-shop practice, and telegraphy. Filipino students are very proficient in drawing, and have done creditable work in telegraphy, but they have not yet learned to associate the idea of hand work with their concept of an education. The "educated gentleman" was taught, in Spanish times, to look down upon manual labor, and it is, and will be, hard to overcome the prejudices that survive the Spanish régime. The Spanish themselves recognized their weakness in this respect and started a school of arts and crafts shortly before the American occupation. Its life was too brief, however, to give it rank even as a beginning.

Besides the government school exhibits there were several fine exhibits made by private institutions, many of which have been established under the American Government and some of which have survived the Spanish rule. The University of St. Thomas ("La Universidad de Santo Tomas") is one of these. The charter of this university antedates that of any American university, and it includes colleges of letters and science, law, and medicine. It is a church institution under the Dominican order, and as a factor in the education and

development of the Philippine people its importance can hardly be overestimated. A private secondary school, which has been established since 1898 and which made a complete and interesting exhibit, was the "Liceo." This is an example of a number of schools in the islands, several of which were represented by excellent exhibits, that are organized, directed, and taught entirely by Filipinos. The "Liceo" maintains a primary department, which is preparatory to the secondary school. Like the University of St. Thomas, its classes are carried on in Spanish, though English is taught in this and other private schools much as German and French are taught in classes in American high schools. As we have found true in America, they are learning that a practical working knowledge of a language is seldom acquired in this way.

In viewing this exhibit of public and private schools one heard frequent expressions of wonder that so much had been accomplished in the short time American schools have been established. To think for a moment that the level of culture and intelligence shown in this exhibit has been attained in four years would be a great mistake. The advent of civilization in the Philippines was many years earlier than in any part of the territory of the Louisiana Purchase, and Spain must be given credit for having provided means for the progress and development of the people of the Philippines during her rule. True, their advance has not been as rapid along many lines as in America, and their civilization has been adapted to their tropical environment and is consequently different from our own. Unfortunately the educational facilities possessed by the Spanish were not such as to provide for a large proportion of the people.

The vast majority of the inhabitants of the islands are now very ignorant, and a determined effort is being made by the Bureau of Education to reach them all. The development of the Filipino teachers is a necessary first step. The present aim is to give every Filipino boy and girl three years in an elementary school. That may not seem a high ideal from the view point of the American teacher, but it is a practical and a possible working plan whose accomplishment will work wonders for the Philippine people. Intermediate, secondary, and special training schools will be maintained, and the demands for new schools and a university will, as far as possible, be met as they arise; but the main work in the Philippines will be in the primary schools for many years to come.

The work of the schools is not confined to the "common branches," but includes manual training and practical industrial work. It is the intention to have a practical school of industrial training in each province and to have agriculture taught in every school. Nature study is now taught in the primary schools, and the course of study is especially arranged to suit local conditions and materials.

Those who have seen the skillful handiwork of pupils shown in the exhibit will be at least hopeful, if not sure, of the results of training in such crafts as pottery work and textile weaving. The basket work, hats, textiles, mats, drawings, and carvings shown in the exhibits of the various primary and secondary schools were of particular interest to American teachers of manual training. One of these teachers, whose excellent work gives weight to the remark, exclaimed enthusiastically, "Why, that's what our American schools are working toward!"

In coming to St. Louis from the Philippines the writer was accompanied by two assistants, Miss Maria del Pilar Zamora and Mr. Antonio Estudillo. By the death of Mr. Estudillo, a few weeks after his arrival in St. Louis, the Philippine bureau of education lost one of its most valued teachers. His appreciation of the opportunity to visit the United States and his eagerness and ability to make the most of it made his death seem particularly sad.

Most visitors to the exposition since the opening of the Philippine model school are familiar with the work of its teacher, Miss Zamora. Every morning from 9 to half past 11 from one to two thousand people visited this school. If they came before half past 10 they saw a class of 21 Visayan boys and girls studying reading, writing, history, geography, arithmetic, and composition. These were pupils from the Visayan village, a few of whom had attended American schools in the islands. In all the surroundings and furnishings of the schoolroom, and in the exclusive use of English as the language of all the classes, the visitor saw a faithful portrayal of a Philippine school.

If the visitor tarried after the dismissal of this class he saw another class enter the schoolroom, a class of pupils such as no schoolhouse ever held before—the children from the villages of non-Christian Filipinos. An important thing for the reader to remember about this class is that the Negritos, Igorote, Tinguian, Bagobos, and Moros of which it was made up are as much of a curiosity to the civilized Filipinos as to ourselves. A Sioux Indian on Broadway would not attract more interest than a Bagobo on the main business street of Manila. Miss Zamora, for example, had never seen one representative of any of these non-Christian tribes before, and she has lived all her life in Manila. As an ethnological study this class was very interesting. The progress made by the Igorote and Moro pupils was more rapid than that of the others, while the Negrito, the aborigine of the islands, proved to have the least mental capacity.

Practically all the educational work in the Philippines is concerned with the children of the twelve Christian tribes, of whom the Visayan village showed a true picture. These twelve tribes form over seven-eighths of the population of the archipelago, the school population numbering approximately one and a half million.

PORTO RICO.

BY E. W. LORD, ASSISTANT COMMISSIONER OF EDUCATION.

ORGANIZATION.

Since the American occupation of Porto Rico in 1898 the American system of public schools has been completely introduced into the island. There is now in operation a system of rural, graded, high, and special schools, which compares favorably with the system of schools in any State in the Union, although, of course, much of the work is in an elementary condition. At the close of the first term of the school year 1904-5 there were enrolled in all the public schools 50,559 pupils. Of this number a little more than half, 25,486, were in the rural schools, the remainder in the graded schools, including high and special schools. The work is based on a course of study in eight grades. As, however, this course has been in operation only during the five years of the American occupation, and practically during only the past three years, there are very few pupils in the higher grades, all but about 1,000 being enrolled in the first five grades. All the rural and graded schools are taught by native teachers, many of whom have received their education either at the insular normal school or in some other normal school. In addition to the native teachers there are employed about 150 American teachers, whose special work is that of teaching English. These teachers are assigned to the graded schools, and go from room to room giving instructions to the pupils. Two or three times a week they give instruction in English to the native teachers, all of whom are required to study that

language. Both teachers and pupils are rapidly learning English, and it would appear that the time is not far distant when the educated people of Porto Rico will be able to use that language as well as their native tongue. In addition to the elementary schools there are now established four high schools, although only two of these are yet doing actual high school work. In the Central High School at San Juan there will be graduated in June, 1904, the first class from a Porto Rican high school, consisting of five young men, all of whom will probably continue their studies in colleges or universities in the United States or in Europe. Most of the teachers in the high schools are Americans.

A few kindergarten schools have been established, and these have proven very popular, but owing to the expense involved it is not probable that this work can be extended. At the present time there are maintained four kindergarten classes, two in San Juan and two in Ponce.

Drawing and music are taught in the schools of the largest cities, special teachers for these subjects being provided in San Juan, Ponce, and Mayaguez. The children have a natural talent for drawing and make great progress in this branch of instruction. The work will probably be extended throughout the schools as rapidly as it can be done advantageously.

Industrial education is receiving considerable attention at the present time, the legislature having authorized the establishment of a number of industrial and manual training schools. Four of these schools which have already been established are proving very successful and apparently are meeting the special needs of the people even better than are the regular schools. In these schools there are classes in woodworking, printing, leather work, basket making, hat making, domestic science, sewing, dressmaking, etc., and also in the regular common school studies. Manual labor has always been distasteful in tropical lands, but it has been proved in our industrial schools that the pupils are willing to work hard and even to perform many unpleasant tasks if only they can see satisfactory results.

To provide as far as possible for higher education, the legislature has established the University of Porto Rico, and made generous provision for its support. As yet, however, the university has only one department organized—the normal department—which includes a first-class normal school, a practice school, and an agricultural experiment school, with which is connected a considerable property where agricultural work may be carried on. In this normal department good work is being done in training teachers for the public schools.

All educational work is carried on under the direction of the commissioner of education, who is appointed by the President of the United States. Local school boards, elected by the people, have some jurisdiction over the schools in their respective municipalities and cooperate with the district superintendents, who are appointed by the commissioner as his local representatives.

The great improvement which has been made in the actual school work is due in no small degree to the effective supervision of these superintendents, of whom there are at present 19, the greater number being Americans.

If we compare the present educational conditions in Porto Rico with conditions under the Spanish administration, we see that an immense advance has indeed been made. One year before the American occupation of the island there were in operation, according to reports made to the Government at that time, 539 schools, with an enrollment of 22,065 pupils. This, however, does not indicate that all of these pupils received regular instruction. It is probable, indeed, that considerably less than half this number were regularly in attendance at any school, and to those who did attend the instruction given was of a most elementary sort, including little more than a thorough drill in the church catechism and a parrot-like learning of certain facts of arithmetic, history, and natural

science. At the present time the total number of schools is about 1,100, more than twice the number maintained under the Spanish Government only five years ago. At the same time it is woefully true that the public schools are now able to accommodate less than one-fourth of the pupils who ought to be there, and this in spite of the fact that more than 25 per cent of all the revenues of the island, both insular and municipal, is expended for educational purposes.

The greatest need of Porto Rico at the present time is the establishment of an immense number of new schools under trained teachers. This, however, can not be accomplished without aid from the National Government or from some other source outside the island. The people here are doing everything that is possible; they realize the need of universal education and are making heroic efforts to extend the benefits of the public school as widely as possible.

No department of the American Government is more acceptable to the Porto Rican people than that which is bringing them the benefits of the American school system, and probably no department is doing more to introduce American ideas and methods. The children in the public schools learn loyalty to the American flag and are proud to consider their land a part of the great Republic. It is an inspiring sight to see a room full of these children of the Tropics lustily singing, in their best English, "My country, 'tis of thee," and raising their hands in salute to the Stars and Stripes.

SOUTH DAKOTA.

EDUCATIONAL HISTORY AND ORGANIZATION.

In the spring of 1860 the settlers at Bonhomme built a little schoolhouse of logs, floorless and dirt roofed, and in it, in the month of May, Miss Emma J. Bradford assembled ten children and taught them for three months. This was the first schoolhouse in Dakota. In the autumn of 1864 Captain Miner proposed to his soldiers that they build a schoolhouse, and they soon had a comfortable log schoolhouse completed in the ravine at Vermilion, and Amos Shaw, one of the soldiers, conducted a school therein during the winter. From that date there has been no break in the public school system of Vermilion.

In 1865 Prof. James S. Foster arrived from New York with his famous colony of sixty families, and almost immediately Governor Edmunds appointed him superintendent of public instruction. Although the compensation of the superintendent was but \$20 per annum, he gave himself energetically to the work and in a brief period had a regular system of public schools established and supported by taxation. The schools were scattered from Fort Randall to Sioux City, but he visited every one of them and encouraged both teachers and patrons, and induced the organization of districts and schools wherever he deemed it possible to sustain an establishment. He conducted the first teachers' institute held in the Territory on November 11, 1867, and it continued in session two weeks.

The first session of the Territorial legislature, held in 1862, adopted a complete code of laws for the conduct of common schools, and it may be added that very few of its successors have failed to follow its example in this respect. By this first code the schools were open only to white children. As late as 1867 a hard fight was made in the legislature, without avail, to strike the word "white" out of the school law, and it was not until the passage of the civil rights bill by Congress that colored children were permitted full rights in our common schools. At the first session the University of Dakota was located at Vermilion.

From the planting of the schoolhouse in the ravine at Vermilion the develop-

ment of the South Dakota school system has kept pace with, if it has not actually led, the demand of the constantly increasing population. The efficient work of James S. Foster for the establishment of the school system was efficiently supplemented by other Territorial superintendents, the office being filled by such men as Gen. W. H. H. Beadle, J. J. McIntyre, Eugene A. Dye, and A. Sheridan Jones. The work of General Beadle in this office made a deep impression, both for the efficiency of the schools at the period and for the cause of education through all of the subsequent years. He was first to grasp the value and possibilities of South Dakota's great inheritance of school lands, and to him more than to any other is due the wise safeguards which protect it from waste and speculation, as well as the minimum price at which it could be sold.

The earliest attempt to establish an institution giving a collegiate course was undertaken by the general association of Congregational churches, which met at Canton in June, 1881, and resolved to establish a college at Yankton. The college was duly established and received its first classes in September of that year. This same year the people of Vermilion set about placing the university on its feet, and an organization was effected which resulted in the voting of \$10,000 of bonds by Clay County, the proceeds of which were used to construct a building which was ready for occupancy in the fall of 1882, and in it was instituted the university, which the ensuing legislature was prevailed upon to endow.

The legislature of 1883 located the agricultural college at Brookings, the normals at Madison and at Spearfish, and appropriated funds for the agricultural college and the Madison normal, which were opened the succeeding year. The next legislature endowed the Spearfish normal, and in 1887 the School of Mines at Rapid City was set up. This same legislature also located a normal school at Springfield, conditioned upon the village providing land as a site.

The legislature of 1899 located the Northern Normal and Industrial School at Aberdeen, and the legislature of 1901 gave it an endowment, so that the main building was erected and the school opened in the autumn of 1902.

In 1883 the Methodists located Dakota University at Mitchell, and the same year Pierre University was established by the Presbyterians. This latter institution has since been removed to Huron, where it is continued as Huron College. In the same year Sioux Falls College was undertaken by the Baptists. In 1884 the Congregationalists established an additional college at Redfield and the Episcopalians undertook All Saints School at Sioux Falls. The Scandinavian Lutherans established Augustana College at Canton the same year, and a normal school at Sioux Falls in 1889. The Mennonites founded a college at Freeman in 1903.

The State cares for its blind at Gary, its deaf at Sioux Falls, its feeble-minded at Redfield, and its unruly at Plankinton.

All of the higher institutions of learning, both State and sectarian, are thoroughly equipped with buildings and apparatus, are modern and progressive, and are doing excellent work, having a combined registration of 4,000 students. The rural schools of the State are doing efficient work in conformity to an approved course of study. High schools are rapidly becoming unified and systematized, uniform courses being used in more than 75 per cent of the cities and towns. The South Dakota Educational Association brings the teachers together for annual conference. The State constitution adopted in 1899 safeguarded the school system in every possible way. The State supervision has been under the direction, successively, of F. L. Pinkham, Cortez Salmon, Frank Crane, Edward E. Collins, and George W. Nash.

There are, according to the 1904 returns, 136,996 school children in South Dakota, 5,025 teachers, 4,031 schoolhouses, 106,822 pupils enrolled. The value of schoolhouses and sites is placed at \$4,224,815.94, and total expenditures for the year ending June 30, 1904, \$2,868,115.03.

THE SOUTH DAKOTA EXHIBIT.

State Superintendent G. W. Nash was appointed by the South Dakota World's Fair commission to take charge of and have general supervision of collecting a suitable educational exhibit for the Louisiana Purchase Exposition. October 1, 1903, he sent to county superintendents and others having supervision of schools a letter which contained extracts from Circular No. 2, issued by Hon. Howard J. Rodgers, chief of the department of education. An earnest appeal, asking for a systematic preparation, was made at this time, and instructions as to place and date of shipping material were given. The Chicago and Northwestern and the Chicago, Milwaukee and St. Paul railway companies kindly transported the material without expense to the exhibitors.

A committee of three, consisting of Mr. M. A. Lange, Miss Clara Cressy, and Mr. C. C. Bras, was appointed by the superintendent to meet at Mitchell and to examine, select, and arrange such a part of the exhibit submitted as would show a clear and concise plan of the work done in the schools of this State.

From Mitchell the exhibit was shipped to St. Louis and was duly installed by Mr. George R. Farmer, the efficient secretary of the South Dakota commission, and Mrs. Lillie S. Cooper, of the Springfield normal, who was afterward director in charge.

The exhibit was most desirably located in block 1 of the Palace of Education and Social Economy, the name of South Dakota appearing in large bronze letters in front. The interior was divided into three compartments and was covered with exhibits of school work of all grades. Many photographs were in evidence and were examined very carefully by visitors. Several counties were well represented by photographs of their district school buildings as well as those of villages and towns.

The following counties were represented: Aurora, Beadle, Bonhomme, Brown, Buffalo, Charles Mix, Clark, Clay, Davison, Day, Deuel, Fall River, Grant, Hand, Hanson, Hughes, Hutchinson, Jerauld, Kingsbury, Lake, Lawrence, McPherson, Marshall, Meade, Minnehaha, Moody, Sanborn, Spink, Turner, Union, and Yankton.

The exhibits from these counties consisted of written work in all grades, including German, Latin, and Science; photographs of the buildings and different departments; collections of notebooks, water-color sketches, maps, and handwork in the form of rugs, hammocks, baskets, and sewing, raffia, and woodwork. The written work included actual daily school work of the pupils, and in several instances was bound in neat volumes.

The exhibit clearly indicates what systematic effort on the part of those who supervise can accomplish. It shows the strong as well as the weak places in our teaching, and suggests remedies for defects.

TENNESSEE.

BY E. A. ENLOE, DIRECTOR.

THE EXHIBIT.

The excellence of Tennessee's educational exhibit is not disclosed by a casual glance. Every inch of available space is utilized.

Beginning at the right of the entrance the visitor finds the exhibit of Bristol and at the left the exhibit of the city schools and the university schools of

Memphis. Between these extremes are found, in order, the displays of the schools and colleges of the whole State, so far as they appear.

The drawings in the Bristol exhibit possess peculiar excellence. The drawings of Tarbox School, of Nashville, are fine, also, and this school displays a bicycle model and a replica of the tomb of Andrew Jackson which are not surpassed by similar work shown at the exposition. The next exhibit is that of the public schools of Knoxville. This display bears testimony to the excellence of the system, the superintendent, and the teachers of the schools of this city.

The colored people of Knoxville are also represented; and besides them, the colored schools of Memphis and the Roger Williams University, of Nashville. The exhibits of the models of Knoxville, of Knox County, and of Jackson, deserve especial attention. Of the exhibits of Jackson, the specimens of manual training and the maps deserve special mention. The exhibit of the Industrial School of Nashville is prominent. The specimens of work are numerous and good. The knives, tools, and horseshoes made by the boys seem equal to similar articles for sale in the stores; and the girls' work, notably the drawn work, compares favorably with the Mexican drawn work. The manual training specimens of the Hamilton County schools are also good.

The literature exercises of the Columbia Female Institute deserve mention, and constitute one of the best exhibits in the display. They are illustrated by pictures suited to the text, and are bound in leather in a very unique way.

Of the more advanced institutions of learning, the exhibit of the Buford College is, perhaps, the most extensive. Among its most salient features are paintings in oil, water color, and pastel, hand-painted china, a burnt-wood screen, herbarium, and Bible work.

Other schools whose exhibits show excellence are:

Mrs. Forest Nixon's School, of Lawrenceburg, exhibit of original music composed by the pupils; the Shelby County schools, and the University of Tennessee, whose model of its grounds and buildings occupies the center of the space, and is an ornament as well as an object lesson.

TEXAS.

BY W. L. LEMMON, SECRETARY OF THE EDUCATION COMMISSION.

ORGANIZATION.

The schools of Texas are maintained by funds from three sources: (1) State permanent endowment, (2) State taxation, (3) local taxation. The State permanent fund is a proud inheritance to Texans, and a subject of great interest to citizens of other States less fortunately provided. State Superintendent Lefevre makes the following showing of this fund September 1, 1903:

Cash, uninvested.....	\$21, 624
Interest-bearing bonds	10, 298, 415
Land notes	18, 546, 580
Leased lands, valued at minimum price of \$1 an acre.....	10, 666, 704
* Total	39, 533, 323

In addition to the thirty-nine and a half million dollars, now producing income, the permanent school fund holds upward of 7,000,000 acres of unleased land, now unproductive of income, but having great possibilities for the future.

In addition to this, the county permanent funds amounted to \$6,867,293, so that the following is the showing for the permanent endowment of the public schools:

State fund-----	\$39, 533, 323
County funds-----	6, 867, 293
Total -----	46, 400, 616

The income from permanent endowment funds for the year ending August 31, 1903, according to State Superintendent Lefevre, was as follows:

From State permanent fund-----	\$1, 349, 240
From county permanent funds-----	345, 036
Total -----	1, 694, 276

The scholastic census for the same year enumerated 759,358 children; therefore the permanent endowment yielded \$2.22 per capita of the census enumeration, or \$2.75 per capita for the actual enrollment in the public schools (613,323) of pupils within the ages of the census (8 to 17 years).

State apportionment.—To the income from the State's permanent fund are added the proceeds of State taxation for the public schools, which amounted to \$2,518,830 for the year ending August 31, 1903, and which, together with the income from the permanent fund, gave a total of \$3,868,069 for State apportionment. This yielded, for the census enumeration of 759,358 children, an apportionment of \$5 per capita; or for the actual enrollment in school of pupils within the ages of the census (613,323), \$6 per capita.

Such an endowment is a fine foundation for a school system, but it may prove enervating or stimulating according to the spirit of those who enjoy it. In the early days of the State history too much dependence was put upon it. There is no better mark of the educational quickening of more recent years than the rapid spread of local taxation to supplement this county fund and State apportionment. Statistics for rural schools that vote local taxes are not available, but the movement is known to be widespread. Independent districts (villages and towns that have more than 200 population) that vote greater local taxes than those allowed common districts have grown from 142 in 1901 to 327 in 1904—that is, every week for two years and a half some village or town has assumed the larger privileges and responsibilities of the independent district.

Owing to a constitutional inhibition Texas provided no public funds for exhibits at the exposition. Funds were provided from voluntary subscriptions of citizens and corporations. The State Teachers' Association appointed an educational commission, composed of the presidents of the university, the normal schools, the agricultural and mechanical college, and the association, together with the State superintendent, a city superintendent, a county superintendent, and a professor from a private school. This commission was instructed to make investigations and was given power to act. Through its secretary it solicited funds for an educational exhibit. Most of the funds used for the exhibit were secured or contributed by pupils and teachers in our schools. So far as I know, Texas was the only State whose educational-exhibit fund was secured by voluntary contributions from the schools of the State. Nothing else connected with the Texas exhibit was as significant of the profoundly patriotic and progressive spirit of the educational work of the State as the manner of providing the funds.

But while this method applied a high test to the educational spirit of the State and afforded a proof of the high quality of it, it was a very faulty method when results in the exhibit itself are considered. Uncertainty as to the time and the amounts of the contributions existed up to the very day of the opening of the exposition, so that no broad or permanent method of organization of the work was ever possible. The exhibits from the different towns and schools were sent in spontaneously and independently; but necessarily, viewed from the standpoint of philosophical principles, or even from that of methodical, practical organization and generalization, the exhibit as a whole was without form and void. It is true, however, that individual exhibits from some cities and from some of our State institutions were complete and well rounded and illustrative of the best modern conceptions of the functions of such educational units.

In the main it may be said that the exhibit amply proved that Texas is an alert student of educational progress; it is trying all things that other States are trying; it is holding fast to the three R's, and has laid hands on the three arts—liberal, industrial, and fine—and the exhibit displayed worthy specimens in all departments.

UTAH.

BY HORACE H. CUMMINGS, DIRECTOR OF THE EXHIBIT.

THE EXHIBIT.

The educational exhibit from Utah occupies a booth about 30 by 27 feet and is displayed upon the walls and in cabinets and glass cases, etc. It consists of samples of pupils' work in all the lines of the most advanced school work and methods. A row of photographs of modern schoolhouses along the sides form an upper frieze which illustrates the fact that Utah has \$39.93 per capita invested in school property, while the per capita tax for the annual maintenance of the schools is equally high in proportion.

Below this frieze are found on one side samples of art work and charts illustrating history, geography, and nature study, while on the other side is arranged a display of manual-training work, sewing, basketry, and colored paintings. Nine leaf cabinets on each side, with bases and shelves containing photographs, written work, sewing work, designs, drawing, and other art work, complete the display on the sides of the booth, one side illustrating elementary schools and the other secondary and parochial schools. The end of the booth is occupied chiefly by the display from the State Normal Training School, consisting of an upper frieze of nature-study art panels, underneath which are three rows of plaster casts of things and scenes illustrating class work, and then a number of original designs for clay work, tiles, sewing, etc., and a design for a large rug, with sections of the same in process of weaving. A model of a mine and cases filled with specimens of clay work, sewing, weaving, etc., complete the training-school exhibit, and, with a fine roll-top desk made by pupils of the Snow Academy, cover the end of the booth to the floor. A hexagonal case filled with work from the State school for the deaf and the blind finishes the list of exhibits.

Space for an exhibit was secured at so late a date that very little time was allowed the schools to prepare any special work, but the display shows that Utah has an efficient school system extending to the remotest parts of the State,

employing the latest methods, and using the best text-books, supplied free to the pupils.

A class of second-grade children from the school for the deaf attracted a great deal of attention during their two months' work at the fair. The latest and best methods were employed, with the result that all the children had learned to speak orally and read lip movements. The daily class work attracted large crowds of the general public and afforded experts and teachers interested in that kind of work a valuable object lesson.

The exhibit most instructive for workers in elementary education was the normal training school exhibit, which illustrated a new and unified course of study worked out by the faculty of the State normal school. It seeks to provide as follows for the correction of the common defects in the usual school work:

First. To utilize instead of suppressing the natural physical activities of the child and make them cooperate with his mental activities.

Second. To encourage original effort on the part of the child instead of prescribing in detail all his school work, as is usually the case.

Third. To unify the whole school work, so that each recitation is seen to be related to the rest of the school work, instead of teaching each branch as a separate, disconnected study.

Fourth. To provide many opportunities for the children to do and say nice and kind things to others, and thus cultivate the altruistic tendencies in their natures in the best way.

Fifth. To socialize the work of the schoolroom and furnish the same incentives to work as actuate the pupil in life, while it places the usual formal studies in a similar relation to the main school work that they occupy in life outside of the school.

The central subject in each grade, respectively, and out of which the formal studies naturally grow, is as follows:

First year: Home environment and relations; lessons on things already somewhat familiar to the young child.

Second year: Shelters. Study of the house; birds' nests and animal shelters; adaption to the needs of their occupants.

Third year: Foods; obtaining, preparing, serving, kinds, cost, etc.

Fourth year: Clothing; necessity, kinds, uses, where obtained, and how prepared; animal coverings, adaption.

Fifth year: Sources of supply. As the pupils have become familiar with the three great necessities whence spring most of our activities for life, they next study the sources of supply of the things needed for shelter, food, and clothing.

Sixth year: Manufacturing these supplies; evolution of machinery, effects, etc.

Seventh year: Transportation and commerce; getting the manufactured products to the consumers; evolution of the means and methods of transportation on land.

Eighth year: Navigation and foreign commerce; relation to other countries; evolution of ships, etc.

Ninth year: The world's great empires and what made them great.

It is believed that the proper development of these topics in accordance with the principles already stated gives the child a comprehension of the things which engage the attention and labor of the average citizen during his life, and therefore prepares him better for life than the ordinary course of formal, unrelated "recitations" usually given. The so-called "common branches" are by no means neglected, but are taught more intensely than before, since a more natural motive stimulates the pupil. He does much reading, for example, in his

search for information on matters of interest to the class, as well as in imparting that information to the class, under the stimulus of the same motive which actuates most of his reading through life. Arithmetic, language, history, geography, spelling, writing, etc., are all taught in this way, at least in the beginning until their necessity is fully realized, and then the usual formal work is given when needed. The natural motive makes learning very much easier and quicker than an artificial one; hence fewer exercises are needed in the formal studies, leaving more time and strength to devote to the central subjects of study.

In short, whatever the pupil reads or writes or makes or paints, the problems he solves, and the principles and facts of science he learns, are made to grow out of or illustrate something he has learned about the central subject of thought as far as possible. He thus becomes accustomed to seeing things in their mutual relations, and unconsciously acquires the ability to recognize and form an estimate of all the conditions and influences in life which may contribute to aid or defeat a desired result. He will be more successful in life.

VIRGINIA.

BY A. M. DOBIE, OF THE UNIVERSITY OF VIRGINIA.

THE VIRGINIA EXHIBIT.

The institutions represented in the Virginia educational exhibit embraced the primary public schools, Roanoke College, Hampden-Sidney College, the Randolph-Macon system of schools and colleges, and the University of Virginia. All of these exhibits were installed in the Virginia State building.

The exhibit of the primary public schools consisted chiefly of specimens of the written work done by the pupils of these schools as required, together with many small objects, the handiwork of the school children, showing the progress made in the various grades along practical manual lines.

The exhibits of Roanoke College and Hampden-Sidney College were very similar in character, composed chiefly of different views of their main buildings and the most picturesque spots in their grounds.

The Randolph-Macon system was represented by a series of cabinets containing charts showing the courses of instruction, photographs of grounds and buildings, the faculties of the various institutions, and student organizations. The cabinets were very comprehensive, and to the interested observer conveyed a faithful impression of the life at the schools and colleges comprising the system. In this exhibit stress was laid on the Randolph-Macon Woman's College, near Lynchburg, Va., an institution occupying a unique and high position in the higher education of women in the South and whose influence has been constantly widening during the last decade.

The most elaborate, complete, and interesting exhibit in the Virginia building, however, was that of the University of Virginia, the capstone of the Virginia public school system. To the founding of this university Jefferson gave the best activities of his later life, and directed that on his tombstone should be placed the title, of which he was so justly proud, that of "Father of the University of Virginia." The most interesting objects in the university exhibit were the Galt heroic statue of Jefferson, the Sully portrait of Jefferson, and

the chair in which he sat when, as Vice-President, he presided over the United States Senate. Many transparencies and photographs showed the picturesque beauty of the grounds and buildings, many of which were planned by Jefferson himself, while numerous mural tablets showed the prominent part played in the destinies of the nation and in the various learned professions by the alumni of this venerable institution. In many ways, too, the distinctive features of this institution were brought out, particularly the honor system, of which the university is the father, and the elective system of independent schools in the academic department. Altogether, the pioneer of State universities was represented by an exhibit that was at the same time complete, comprehensive, artistic, and interesting.

Besides the institutions first mentioned, the Virginia building contained small exhibits from Hollins Institute, Sweetbrier Institute, and the Virginia College for Young Ladies.

WEST VIRGINIA.

THE EXHIBIT.

The West Virginia educational exhibit at St. Louis was not very large or varied, but it contained a number of features that indicate a good degree of industrial progress in the Mountain State. The exhibit consisted of maps, charts, drawings, models, and other kinds of handicraft, together with photographs, books of manuscripts, etc. It was prepared under the direction of State Supt. Thomas C. Miller, who was assisted by some of the leading educational workers of the State.

One of the most noticeable portions of the exhibit was a series of graphic charts, prepared by the schools of Parkersburg and Sistersville, illustrating by pictures, drawings, and miniature objects the growth of some industry or the development of some product, as glass from sand, leather from rawhide, nails, springs, etc., from iron ore, and silks and other fabrics from the cocoon, the cotton boll, or wool. Each chart was accompanied by a sketch describing the various processes of manufacture. Lumber, agricultural products, and the minerals of the State were also made prominent by this graphic presentation, the charts showing the strata of oil-bearing sands and the situation of the coal measures claiming especial attention.

In the exhibit were about 100 volumes written by West Virginia authors, a number of educational works, a full set of the publications issued by the State department of schools, including the *History of Education in West Virginia*, recently published. This book of over 300 pages and containing many illustrations gives quite a full account of the growth and development of the educational work of the State, and has been widely distributed.

Over 500 photographs were shown in cabinets. These were of schools and school buildings chiefly, and indicate a good degree of advancement in school-house architecture. The manuscript exhibited was the everyday work of the pupils and was of such a character as to indicate commendable progress.

The allowance made by the State commission for the educational exhibit was \$2,000, but this sum was considerably supplemented from the contingent fund of the department of schools and by a large amount of gratuitous labor.

WISCONSIN.

BY W. D. PARKER, DIRECTOR.

THE EXHIBIT.

A committee consisting of fourteen persons was named by the Wisconsin Teachers' Association at its annual meeting in December, 1901, under whose direction steps were taken that have led to the representation of Wisconsin at the Louisiana Purchase Exposition. William George Bruce, of Milwaukee, publisher of the American School Board Journal, set in motion the activities that resulted in the creation of this committee, and his judgment has been followed in the proceedings in the name of the State.

When convened in May, 1902, the committee found insufficient funds for its purposes and, after naming a subcommittee to outline a general plan of procedure, adjourned subject to call. The general committee was convened in September, 1902, and the subcommittee reported through William George Bruce that all branches of the State educational system were represented in the committee; that groups of educational exhibits had been named by the exposition managers; that it was recommended that some person be named to direct affairs in behalf of the committee; that 5,000 feet of floor space be secured for displaying work; that an appropriate booth structure be erected in the palace of education for receiving the exhibits; that exhibitors be assured that all articles contributed would be received at a central place in the State, displayed, cared for, and returned to exhibitors at the close of the season, all at the expense of the State after the exhibits should come into possession of the committees, and, finally, that the State managers should be invited to appropriate \$10,250 for meeting the expenses, and that they should be informed of these determinations and requested to allow the sum named.

The general committee held the third meeting on December 29, 1902, and adopted a report made by William George Bruce that provided a detailed plan of an exhibit in conformity to the general outline framed by the chief of the department of education of the exposition. The committee voted to recommend the Wisconsin Teachers' Association, then about to convene, to petition the legislature to set aside the sum of \$10,000 for the use of the committee.

The legislature having made its final appropriation for the exposition, and the committee having been notified that \$7,000 had been placed at its command, the committee was convened at Milwaukee on August 29, 1903, and it was voted that W. D. Parker be made permanent secretary to prosecute the business; that a special auditing committee be authorized to act during the season, and that the actual work be set in motion at once.

The board of school directors of the city of Milwaukee tendered ample rooms in the city hall for the use of the officers, necessary office furniture was assembled, a stenographic typewriter was employed, and on the 18th of September the whole plan of the exhibit was borne to the attention of teachers and superintendents by printed circulars. Personal visitation at local associations of teachers during October showed such apathy that a revised circular was mailed urging school board members, teachers, and superintendents to authorize the preparation of exhibits, and thereafter the whole work progressed encouragingly, so that, agreeable to dates fixed, the exhibits began to assemble at Milwaukee early in February. On the 2d of April all material had arrived at Milwaukee, had been acknowledged, inventoried, assorted, delivered to a transportation company, and consigned to the exposition, where it was delivered in

excellent condition on the 10th of April. Minor details excepted, the installation was completed at the date of the formal opening of the exposition on the 30th of April. In this final movement the celerity of transportation companies and the routine enforced by the exposition company were so complete as to leave little for the director to wish.

The secretary's office during the season of fifteen months issued 4,000 copies of the chief circulars, 1,500 copies of mimeographs, 240 editorials, and 1,200 individual letters.

The space allotted to Wisconsin was at the east of the main north door of the Palace of Education, 27 feet wide and extending 75 feet along the main north wall. Built upon this space was a platform raised 4 inches, and erected thereon was a façade having fluted columns that supported a massive cornice, all built of wood and painted white. Four partitions abutting the north wall and 26 cabinets, each having 15 swinging leaves, extended the wall surface so that its aggregate was 3,500 feet.

The exhibit was planned to show samples of each feature of the public school system as recognized by statutes and to include material from private and parochial schools as far as practicable.

The public school system consists of schools of country districts and of cities that fall under the supervision of local and State officers. The names of the departments are kindergarten, primary, intermediate, grammar, State graded, high, and university, but the university exhibit occupied space separate from that of the State exhibit. In addition to the public school exhibits proper this exhibit included articles from the State schools for the blind, for the deaf, for the dependent, for wayward boys and girls, for the feeble-minded, and from the State normal schools, the county teachers' training schools, the county schools of agriculture and domestic economy, and the United States schools for Indians.

While manual training products were prominent, the exhibit was designed to represent all other phases of school activity, and to this end an abundance of manuscript books, drawings, photographs, courses of study, and models of school equipment and drawings of schoolhouse construction were installed.

One of the chief attractions was the line of photographs and charts of courses of study shown by two county schools of agriculture and domestic economy—institutions of unique character in America—one located at Menominee, the other at Wausau. They are housed at the expense of the respective counties, are maintained in part at the expense of the State, and their courses of study of two years' duration comprehend an interesting body of work that has called many boys and girls of farmers to enlist permanently in industries that are represented in the following branches of study:

For boys: Blacksmithing, carpentry, dairying, farm accounts, rural architecture, soil, fertilizers, and work in soils.

For boys and girls: Business arithmetic, civil government, English, library readings, economic insects, disease, plant life, poultry, United States history, vegetable and fruit gardening.

For girls: Chemistry of foods, cooking, sewing, millinery, home economy, home nursing, hygiene, and laundry.

The wood exhibits in manual training prepared by students of the Oshkosh State Normal School and the outlines in domestic economy by the Stevens Point State Normal School showed excellence for the experimental period of three years. These products seemed to justify the zeal of the advocates of those lines for teachers.

The city of Milwaukee made a special appropriation of \$4,000 for its exhibit. Mr. A. E. Kagel, assistant superintendent of the city public schools, was placed

in charge of the preparations for the exhibit. In an allotted space of 460 square feet he tried to show the work of 38,553 pupils, taught by 956 teachers, and housed in 56 splendid buildings, also the work of such institutions as the public museum which correlate with the actual school work. To show this in a logical manner the exhibit was made to be distinctly developmental in its make-up, with the idea of growth predominant everywhere.

To add an original feature and make the exhibit more attractive Mr. Kagel conceived the idea of showing, by means of 500 records, covering a variety of 130 lessons, the work of the Milwaukee school children in reading, recitation, and singing.

Flanked on one side by a series of cases showing manual-training work, and on the other side by cases and cabinets showing school-museum work and photographs of buildings, the back of the exhibit booth is used to display drawings, by means of both wall and cabinet mountings. The front is given an inviting appearance by a huge settee and armchair—both products of the high school manual-training department. The written work is found in substantially bound volumes distributed on a large table, while the kindergarten work is mounted on a frame made especially for that purpose.

The administrative side of the school system is elucidated by a series of charts, which also give statistical information. Of the total number (103,923) of children of legal school age, 4 to 20 years, only 40.6 per cent attend public schools, private schools drawing 21.2 per cent. The public school children are taught by competent teachers holding a university or State normal school diploma, or some certification of efficiency to teach given by a committee of the school board. Appointments are made by the committee on examination and appointment of the board of school directors. The latter, one from each ward, are appointed by the school board commission, four in number. These in turn are appointed by the mayor for a term of four years, only one commissioner's term expiring each year.

The excellence of the kindergarten exhibit has influenced several prominent educators to visit Milwaukee that they might look into the system which showed such results.

Without enumerating in detail all the branches taught in the grammar grades and high schools, especial mention should be made of the work in drawing, geography, writing, and arithmetic.

The school for the deaf was well represented, its unique feature being a series of phonographic records portraying the results in speech obtained from the teaching of articulation and enunciation.

A case filled with museum specimens indicates that the institution is doing something tangible in helping to educate the school children of the city. A pamphlet describes at length the working of the system by means of which 20,000 pupils received instruction at the museum during 1903. This work of the Milwaukee public schools "is probably unique in the history of the schools of the United States, in that attendance at the museum is required of pupils. All classes from the third to the eighth grade are sent to the museum for certain definite work correlated with their class studies, and museum work is as much a part of the school work as any other study of the curriculum."

In conclusion, the series of pamphlets on various phases of school work issued by the Milwaukee board of school directors must be mentioned. They covered such subjects as school laws, portable schoolhouses, cooking schools, etc., and did much to enlighten the student in regard to educational conditions in Wisconsin's metropolis, thus greatly adding to the efficiency of the exhibit.

The cities of Appleton, Ashland, Chippewa Falls, Madison, Merrill, Neenah, Janesville, and Superior made satisfactorily organized exhibits.

The Wisconsin free library commission showed photographs and statistics relating to many library buildings and organizations in the State and two traveling libraries, one containing books in English and the other in German.

The German-English Academy and the National German-American Teachers' Seminary, of Milwaukee, were represented by sewing, clay modeling, manuscript books, and allied material.

The Hillside Home School, at Hillside, showed photographs, drawings, and descriptive circulars that indicate a unique institution located in the country, which has courses of study extending from the kindergarten to preparation for college. The Gesu parochial school, of Milwaukee, showed excellent manuscripts, maps, and photographs.

Exhibits from the Stout Manual Training School and the allied Stout Teachers' Training Schools at Menominee made a group that justly attracted much attention from all classes of visitors. The exhibits consisted of the latest approved forms of conventional objects and some very suggestive extemporized forms, all in wood, iron, and fabrics, and photographs of raffia and clay models whose originals were deemed too bulky and fragile for transportation. These schools omitted manuscripts and other documentary articles, showing, however, a remarkable collection of model designs for wall paper and fine lines of drawings and water colors.

The Wisconsin Home for the Feeble Minded, at Chippewa Falls, showed that its inmates have skill in raffia, manuscripts, wood construction, and shoe-making. This school was well represented.

Industrial products shown by city schools for the deaf were valid arguments in favor of such institutions, and manuscript books and papers completed the illustration of the instruction given by the purely oral method, a method believed to promote advancement of the deaf in self-helpful habits.

Pamphlets giving the courses of study of many schools that were otherwise represented were sought especially by visitors from foreign lands and by those who were in pursuit of means of realizing ideals. Among the courses that attracted marked attention were those of rural schools (courses now in operation more than twenty-five years under direction of the officers of the State department of education), those of State graded schools directed by State officers, of the county training schools for preparation of teachers of rural schools, and of the county schools of agriculture and domestic economy.

At the close of the season, when all exhibits shall have been dispatched to their places of origin and all bills shall have been paid, the \$7,000 appropriated for the use of the committee will have been expended. No serious deficiency resulted from reducing the actual expenses some \$3,000 below the original estimate, though some desirable exhibits in statistical lines relating to the whole State were of necessity omitted.

It is the prime economic object of a world's fair to advance ideals. None but superior exhibits will attract sufficient attention to enable visitors to bear impressions to their homes that may persist sufficiently to take concrete form in the new locality. Therefore the director for each State serves one of the largest interests by soliciting and installing only the best that his constituents can produce, for the discriminating visitor, who at home might plead for the display of mediocre articles, will in the presence of the excellencies of the fair, approve the director's original rejection of duplicates and of series that require minute attention. This conviction readily suggests that mere personal gratification of seeing one's products at a great fair is no sufficient reason for their installation.

CITY OF CHICAGO.

BY C. D. LOWRY.

THE EXHIBIT.

The exhibit of the board of education of the city of Chicago at the Louisiana Purchase Exposition occupied a portion of the booth devoted to the exhibit of the State of Illinois.

The plan of the booth was prepared under the direction of the State commission, and the expense of erecting the same was borne by the State. The city exhibit occupied a floor space of about 27 by 30 feet. Its chief features were:

An account of the organization of the board of education.

A brief historical sketch of the schools, illustrated by a series of photographs of typical school buildings, beginning with the one-room frame building erected in 1837. Descriptions and illustrations of the various departments through which the school board carries on its work.

Descriptions and illustrations of the work of the Chicago Normal School; the work of the compulsory educational department, including the work of the parental school and the school at the House of Correction; the work of the evening schools and vacation schools, illustrations showing the development of schoolhouse construction, heating, and ventilation; an exposition of the course of study in each of the subjects taught.

The descriptions were printed, and, together with the illustrations, were mounted on large cards and hung in cabinets of the usual sort.

On the walls of the booth were hung a number of pictures furnished by the Public School Art Society as suitable for schoolroom decoration; also several pictures of the latest types of school buildings erected by the city.

The work in illustration or exposition of the course of study was prepared as follows: A general notice was sent to all the schools stating that written work or work in drawing was wanted in all subjects and all grades, and each school was permitted to send in what it preferred, it being stipulated that in any case the work of a whole class should be presented and that the work should be the ordinary school work. From the papers that were sent in two kinds of selections were made.

First. Papers were selected which, taken together, would represent typical work in a given subject, from the lowest grade to the highest grade in which that subject was studied. For example, the work in English was shown as developed through the eight grades of the elementary schools, excluding the kindergarten, and the four grades of the high schools. The work in science, beginning with the simplest nature study in grade 1, was shown as developing into geography and elementary science in the higher grades, and then into the sciences of physics, biology, etc., in the high schools. These selected papers were mounted on sheets of cardboard. These cards were fastened in swinging frames that were inclosed in cabinets. The cabinet containing work in any given subject in the elementary schools was placed near that containing work done in the same subject in the high schools. One cabinet was devoted to the work of the kindergarten. It contained cuttings, drawings, hand work, and photographs of classes at work or play.

Second. The work of entire classes in a given subject was bound up in volumes, a number of volumes being devoted to each subject. A few volumes were also arranged to show the development of a given subject through a number of grades in one school.

The exhibit in manual training consisted of three parts:

(1) *The work of the R. T. Crane Manual Training School.*—This school has in addition to the usual equipment of laboratories, etc., for the regular high school course of four years, large and fully equipped machine shops, carpenter shops, foundry, and blacksmith shop. The exhibit of this school occupied a large case, and consisted of the finished work of pupils in the four lines of manual-training work above mentioned; also of a complete gas engine about 20 inches high, the work entirely of the pupils of this school. Two cabinets were devoted to the drawing and academic work of the school.

(2) *The manual-training work of the elementary schools.*—This consisted of models by the boys of the seventh and eighth grades of the elementary schools. All of the boys of these grades in the elementary schools are taught manual training (carpentry and mechanical drawing) by special teachers. The work of the girls in the seventh and eighth grades in sewing was illustrated by samples of exercises in sewing and by finished garments. The work in cooking was described in writing. All of the classes (girls) in the seventh and eighth grades of the elementary schools are taught either cooking or sewing by special teachers.

(3) *The construction work of the grades below the seventh in the elementary schools.*—This work has not been systematized. The work shown was a selection of that which was done in many of the schools under the supervision of the grade teacher, and consisted of work in many materials, such as beads, raffia, paper, cardboard, cloth, clay, etc.

The work of the elementary schools was displayed in the showcases and upon shelves in the lower part of the cabinets. One cabinet was devoted to the work in physical training and the work of the child-study department. The work in physical training was illustrated by a large number of photographs, showing pupils at work on all forms of apparatus in the high school gymnasiums and pupils playing various athletic games in these gymnasiums, and photographs of the pupils in the elementary schools exercising on the simpler apparatus installed in corridors and class rooms. In the high schools the work is carried on by special teachers of physical culture. Each high school is supplied with a fully equipped gymnasium. In the elementary schools the work is conducted by the elementary teacher, supervised by special teachers.

The work of the child-study department was made up of photographs and charts illustrating the variations in height, weight, physical strength, and vital capacity of children; by diagrams showing the rate of fatigue and variations of energy of children during different hours of the day; also, descriptions and illustrations of the ways in which children are examined to determine their physical condition. The diagrams were made from data obtained from the examination of several thousand pupils in the Chicago schools.

The exhibit of the compulsory-education department outlined the methods by which truants are followed up and the means by which the Parental School and the house of correction endeavor to reform persistent truants and juvenile criminals. The department is organized under State law. The head of the department has under his charge about 25 truant officers. Habitual truants are reported by the schools. These are followed up; the parents are admonished, if the absence is due to their negligence; and, as a last resort, delinquent parents are prosecuted if they fail to send children to school. The Parental School occupies a number of buildings located upon a large farm on the outskirts of the city. Truants and boys who are incorrigible in the ordinary schools are committed to this school by action of the juvenile court. Here the boys attend classes in the ordinary studies and in manual training during part of the day and have vigorous drill in military tactics; during the open season

they work on the farm, and at other times are under family government in the cottages. The boys are discharged from the school when they show evidence of trustworthiness or upon reaching the age of 14 years.

The work of the normal school and the normal extension occupied four cabinets. This school provides a course of two years, which fits for teaching in the elementary schools, also special courses in kindergarten work, in cooking, and in sewing. Two large elementary schools are associated with the normal school as practice schools. The work in normal extension was of particular interest. This department of school work has been in operation for about two years. It is established to furnish teachers of the city opportunity for study in professional and academic lines. Classes are formed at different centers through the city, wherever a sufficient number of teachers make request for the same. The classes are conducted largely by the instructors in the normal school, but many others are employed. The cost of instruction is paid by the board of education. All teachers, whether in public or private schools, are eligible for membership in these classes. The enrollment is between four and five thousand.

The department for the instruction of the blind was illustrated by hand work made by the pupils, by written exercises in the point alphabet, and by maps and books printed for the use of the blind. The pupils are taught in the elementary schools at convenient centers. The teacher is furnished with a class of five or six. During part of the time the pupils are under the direction of this teacher in order to learn special work. At other times they join in with regular classes of other children. The department is provided with an outfit for printing maps and books in raised characters.

The work of the schools for the deaf was illustrated by exercises and samples of hand work. These children are taught in different centers in classes of eight. The instruction is by either the oral or the combined method, as the parents of the children elect. Practically all have chosen the oral method.

There are two schools for crippled children, containing about 100 pupils in all. The children are brought to the schools and returned to their homes in conveyances furnished by the board of education. They are taught the ordinary subjects of school work. The school furniture and equipment is adapted to their needs.

The bureau of geography was originally a voluntary organization supported by the principals in the elementary schools. The expense of maintenance has recently been assumed by the board of education. Its work is to prepare collections of raw and manufactured products, with descriptions and photographs relating to the means of production and processes of manufacture. Typical collections were exhibited.

The Projection Club is an organization supported by voluntary contributions from the schools. The club owns, or has the use of, about 132 sets of slides of 50 each. These slides are used in teaching geography, science, history, and literature. A large number of these slides were taken to the exposition and their use was demonstrated by the attendant in charge of the exhibit at certain hours of the day. Selected slides were projected upon a shaded screen. This screen was so arranged and the intensity of the light was so regulated that the pictures could be seen without darkening the inclosure. As a further illustration of the work of the schools practically all the photographs contained in the various cabinets and many others illustrating various phases of school work were made into lantern slides and projected on the screen.

Vacation schools have been maintained for several years in the densely populated sections of the city. They are supported partly by the board of education and partly by private contributions. Their work was illustrated by photographs showing the excursions and the classes in the gardens and playgrounds and by drawings and hand work.

CITY OF CLEVELAND.

BY EDWIN F. MOULTON, SUPERINTENDENT OF INSTRUCTION.

ORGANIZATION.

For twelve years the Cleveland public schools have been operated under the so-called "Federal plan." The main features of this plan are a small board of seven members elected at large, with tenure of office for two years, clothed with purely legislative powers; a school director elected at large, with same tenure of office as the executive of the business department, and a superintendent of instruction appointed by the director with full authority in the educational department, having power to appoint and dismiss assistants, supervisors, principals, and teachers. The tenure of office for the superintendent is during good behavior.

The several departments of the schools are as follows: Normal, high, elementary, manual training, kindergarten, school for the deaf, evening schools (elementary and high), summer vacation schools, playgrounds, boys' schools for disciplinary purposes, with subdepartments of music, physical training, and drawing. The schools of the city are in close connection with the central office and directly under the control of the superintendent, his assistants, and the heads of the several departments named above.

The statistical exhibit, 1902-3, shows: Total operating expenses of school system, \$1,734,847.68; teachers, 1,484; pupils, 62,874; pupils of American parentage, 62.8 per cent; foreign, 37.2 per cent.

THE CLEVELAND EXHIBIT.

The primary step toward the Cleveland exhibit was an appropriation of \$3,000 by the board of education, which, with a later appropriation of \$600, covered all expenses. An executive committee, consisting of the superintendent of schools, school director, two assistant superintendents, two members of the supervisory force, and one member of the board of education, had entire charge of the exhibit, including the expenditure of money within the limits of the appropriation. Subcommittees submitted in writing the best means of exhibiting the work of the various departments of the schools. From these reports a unified exhibit was arranged by the executive committee. Instructions and supplies for exhibit work were sent out through the heads of the subcommittees, through principals' meetings, and by circulars from the superintendent's office. From the class work selections were made by the various subcommittees, directed by the executive committee. Manuscripts, photographs, drawings, and manual-training models were arranged, and either bound in volumes or mounted in leaf cabinets, wall panels, and frames, or prepared for exhibition in wall cases, and all packed for shipment.

The normal school exhibit shows the character of work done through photographs and manuscripts selected from work of pupil teachers in the various departments. The school furnishes a philosophic basis for professional work, and supplements this with a prolonged period of practical teaching under expert direction.

The five high schools are represented by manuscripts of classics, modern languages, English history, mathematics, and natural sciences, and by photographs of laboratories, libraries, gymnasiums, school societies, and athletic teams. The exhibit certifies to the high standard maintained.

The elementary schools' exhibit of language work comprises:

1. Grammar manuscripts, which evince a knowledge of technical grammar and its application, and illustrate how this subject contributes to the study of literature.

2. Compositions, which illustrate correlation with other subjects. These evidence training in narrative and descriptive writing, also individuality and freedom of treatment, spontaneity of expression, and genuineness of work. The subjects of the compositions are as follows:

(a) Reading and literature, exhibited in (1) supplementary reading books, which correlate with other branches and serve as the basis of work in literature and composition, and (2) original reading lessons, by first grade teachers, which are founded upon veritable experiences of the children in the world of social activities, the nature world, and the realm of storyland, and lead them through self-realization to self-expression.

(b) History and civics, comprising a study of the development of our national life. These compositions illustrate its purpose, which is to give the pupil a knowledge of the history of and to instill a love for his country, and to enlighten him as to duties and privileges. They show the pupil's assimilation of facts and reveal his state of mind toward the subject.

(c) Geography work, exhibited in illustrated manuscripts and maps, and its aim indicated by the pupil's interest and pleasure in the observation of physical conditions of his home neighborhood; by his vivid picturing of places and conditions beyond the sense horizon; by his grasp of the relation of human industries to physical conditions, and by his power to think.

(d) Elementary science and nature study, the compositions manifesting their essential purpose, which is to make the individual happy in his environment by inciting an interest in and love for common things, and by increasing his knowledge and appreciation of the wonders and beauties of the physical world.

3. As German is elective, the growth of the department shows its practical as well as its educational value. These results are seen more particularly in the elementary work, while in the higher grades the pupil's knowledge of the theory and facility in the use of the language are shown.

The arithmetic exhibits are of regular school work. The aim is to provide problems drawn from practical, industrial, and scientific sources, thus furnishing a basis for unifying this work with other subjects.

In the first grade the work is objective, constructive, and creative, and closely correlated with manual training.

An economical and practical application of educational manual training to a large school system is exhibited. Its purpose is development of originality, initiative, constructive power, and artistic sense; it essays correlation with regular school work.

The drawing exhibit illustrates a definite number of consecutively attainable steps in instruction in drawing, beginning with the simplest and ending with the most complex, and shows the daily work of pupils and the capability of entire classes.

Music is exhibited by manuscripts showing, as a distinctive feature, the development of invention, beginning with original melodies by children of the third grade and extending to the writing of four-part music in the eighth grade.

A modified Swedish system of progressive physical exercises and games, as shown by photographs, has been used. By these exercises every part of the muscular system is brought into action and developed.

The kindergarten exhibit shows, through photographs, the various activities of the kindergartens and original gift forms made by the children. The hand-work, all unaided, shows skill of hand, increasing power of expression and control of material.

Special departments.

In the school for the deaf the oral method is used exclusively. Manuscripts, kindergarten work, and manual training are shown.

The boys' school receives boys persistently truant or incorrigible. The exhibit shows the possibility of relieving the ordinary school and of so treating the boy elsewhere as to prepare him to enter again the regular school. The truancy department records every case reported by means of the card system. Age and schooling certificates are important data. Complete forms, including the record of an obstinate truant, are exhibited.

Evening high and elementary school students represent two classes—foreigners desiring to acquire English and working men and women seeking to prepare for better positions.

Unique features.

The Home Gardening Association distributes at cost hundreds of thousands of seed packages and bulbs, and exerts a marked influence on civic improvement.

The Art Education Society, composed of the teachers, has placed in the schools more than 4,000 pictures and casts of artistic merit, examples of which are in the exhibit.

The children's library, through the joint action of the public library and the schools, brings the finest reading matter to the pupils.

The teachers' lecture course, with a membership of over a thousand, brings its members the best thought in many lines.

The Mutual Assistance Association, 1,000 members, renders pecuniary assistance to teachers temporarily absent through disability.

The exhibit comprises the work of entire classes and selected manuscripts, corrected and uncorrected, representing every building and all grades; also the work of three entire elementary schools of American, foreign, and mixed nationalities.

The exhibit as a whole shows the child's effort at self-realization, as a worker, as a thinker, and as a social being with rights to maintain and duties to perform.

The unity of the work is to be noted. This is accomplished through harmonious concerted effort of central management. No special emphasis is placed on any one department, the endeavor being toward an all-round, symmetrical development of the individual through the system on the highest plane consistent with existing economic and social conditions.

CITY OF NEW YORK.

BY A. W. EDSON, DIRECTOR.

THE EXHIBIT.

The city inclosure was a continuation of the State inclosure. It had a floor space 27 by 52 feet and walls 15 feet in height. It had a dark Flemish oak finish, with staff ornamentation of old-ivory finish, and was noticeable for its dignity and beauty. Directly over the corridor entrance was a seal of the city in staff some 4 feet in height. The walls were covered with a light-green burlap. Several partition walls 9 feet in height projected into the inclosure, making alcoves, in which were arranged wall cabinets.

Below the wall cabinets were counters and shelves for the bound volumes,

albums, pamphlets, and shopwork. On the counters and in the corners of the alcoves were glass show cases for the display of manual work from kindergartens and from classes in sewing, cooking, drawing, and shopwork in day, evening, and vacation schools. The inclosure was furnished with rugs, tables, chairs, and a settee. On the top of the inside partitions large potted plants contributed to the decoration.

The general idea pervading the New York City exhibit was an exemplification of the course of study from the kindergarten through the high school. Each subject in each grade of the course was treated in considerable detail. The work displayed was confined wholly to the public schools. In order to make the exhibit fairly representative of school work in all sections of the city, four schools in each of the 46 districts were selected as representatives. In order to restrict the amount of work in any school and to make the preparation of the exhibit comparatively light, no school was allowed more than two subjects and no more than two grades were allowed to work on any one topic. Thus about 200 schools and 600 classes in the elementary grades and all of the high schools participated.

The preparation of work was confined to the months of December and January. During these months the classes prepared ten sets of papers. From each of nine of these exercises the best six papers were selected. In the tenth exercise, prepared during the second week in January, all the papers of the class, good, bad, and indifferent, were reserved. Thus for nine exercises a limited number of the best papers was selected, and in one exercise the paper of each pupil in the classes participating was reserved.

One of the distinguishing features of the exhibit of written work in the city of New York and one deserving special commendation was the effort to have the exhibit present the honest effort of pupils and be fairly representative of the regular work of the schools. First drafts only were presented, except in a few exercises in the high schools, where both first drafts and copies were submitted. In most instances the method by which the teacher unfolded the subject was clearly indicated. The process rather than the product was made the important feature.

To accompany each set of papers, whether six or fifty papers, a statement blank was filled out by the class teacher. This statement was designed to give an intelligent and definite idea of the line of work pursued by teachers and pupils and to answer inquiries sure to be made by those who carefully inspected the work. The following is a copy:

LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, 1904.

DEPARTMENT OF EDUCATION.

THE CITY OF NEW YORK.

Teacher's statement.

1. Subject _____.
2. _____ year of school work, _____ half.
3. Number of pupils in class _____.
4. Number of pupils whose papers are here exhibited _____.
5. Time per week given to class instruction in this subject _____.
6. Connection of this exercise with previous or subsequent work _____.
7. Questions or topics given to class _____.
8. Time spent by pupils in preparing for the written exercise _____.
9. Nature of preparation _____.
10. Time occupied in writing _____.
11. Usual method of criticism or revision by class or by teacher _____.

I hereby certify that the following papers exhibit the pupils' first drafts and show the regular work of the class.

(Signed) _____, teacher, school _____, Borough of _____.

Dated _____, 190—.

The greater portion of the written work, classified by subjects and grades, was bound into volumes, 300 in all, of 400 sheets each, the binding for the selected papers differing in color from the binding for the volumes representing the work of the entire class. Selected papers also were mounted on cardboard and inserted in wall cabinets.

In order to display properly the written work, drawings, maps, photographs, sewing, cord work, raffia blanks, circulars, etc., 58 wall cabinets and 90 albums were used. Each wall cabinet had 33 sheets of mounted cardboard, 22 by 28 inches, and each album had 25 leaves, 18 by 22 inches, mounted on both sides. In the glass of each door of the cabinet the seal of the board of education was daintily sketched, and back of each glass was a large photograph or group of photographs representing some educational activity, so that the first impression on entering the inclosure was a pleasing one.

The photographic exhibit was very complete. It consisted of ten or twelve hundred photographs, 8 by 10 inches or 11 by 14 inches, and covered the whole field of the city's educational activity. These photographs represented classes at work, the conditions under which they worked, and, as far as possible, the method of work in the day and evening schools, vacation schools, playgrounds, recreation centers, recreation piers, roof playgrounds, kindergartens, laboratories, and gymnasiums: classes in the parks, at the botanical garden, zoological park, natural history museum, and aquarium.

The photographic exhibit was of special value in representing the great achievements made in recent years in schoolhouse architecture. Upon the inside walls and upon the corridor side of the inclosure there were 35 large framed photographs and drawings in colors of some of the latest and best school buildings erected in the city. Two of the wall cabinets were filled with photographs of school buildings, so that anyone interested in schoolhouse construction could easily study every detail of the best type of school buildings that has found expression in this city.

On the floor, placed on high tables, were four elegant and expensive models of school buildings—the Morris High School, the De Witt Clinton High School, Public School 62, and a horizontal section of the third floor of Public School 62, the largest elementary school building in the world.

On the walls of the inclosure, in addition to the photographs and drawings of school buildings, were 80 frames, 24 by 30 inches, for charts and mounted material under glass. The statistical and graphic charts showed the remarkable growth of the city in population, in school enrollment, school attendance, expenses, etc., during the past fifty years. Valuable statistical information bearing upon the number of teachers employed, the attendance of pupils in the day, evening, and vacation schools, expenses, etc., for the year 1903, was displayed on charts. A tabular view of the teachers' salary schedules attracted much attention and favorable comment.

The arrangement and contents of the 58 wall cabinets, beginning at the right in the entrance from the State inclosure, were as follows:

Cabinets 1, 2, and 3 were devoted to vacation schools and playgrounds. Much of this exhibit was in the nature of photographs of classes at the outdoor and indoor playgrounds, evening play centers, and roof playgrounds, baths and swimming pools, and of classes engaged in the various industries taught in the vacation schools. Specimens of work in fret sawing, whittling, burnt wood, bench work, Venetian iron, leather, basketry, chair caning, elementary and advanced sewing, drawing, millinery, embroidery, knitting, and crocheting were displayed on the walls and shelves and in show cases near by. Cabinets 4 and 5 held photographs of classes at work in the evening schools, elementary and high, of classes in regular class rooms, laboratories, drawing rooms, and

assemblies, and specimens of mechanical and architectural drawing, and drawing from life and from cast. The evening schools furnished a dynamo, a chemical and physical apparatus, and specimens of work in dressmaking and millinery. The hats made of raffia were of superior workmanship. Cabinets 6 to 11, inclusive, held a large variety of specimens of cord and constructive work and sewing taught the boys and girls through the first three years, and of sewing taught the girls through the remaining years of the school course. The constructive work in cord and raffia—knots, chains, stitches, weaving, and basketry—were a progressive series of exercises to develop the creative and inventive faculty of children and to train the muscles of the fingers to freedom of movement and deftness of touch. The specimens of sewing were carefully graded from elementary stitches on canvas worked with worsted and coarse needle to fine sewing and garment making. Cabinet 12 included charts and theme work, illustrating and explaining the work attempted in domestic science in the last two years of the elementary school course and showing the close correlation of this subject with the other subjects of the school curriculum. In a glass showcase was an excellent exhibit of canned and preserved fruits and vegetables and of bread and candy making. In frames on the walls were illustrations of the work in nursing and laundering and in personal hygiene. On a stand near by in a glass case was a model sitting room arranged from a hygienic, artistic, and economic standpoint. Cabinets 13 to 20 included selected specimens in drawing, construction, and design. The cabinets were arranged to illustrate the eight years' course of study, one cabinet for each year. In each of the cabinets the first ten cards were devoted to drawings of familiar objects, the second ten cards to illustrative drawings in the lower grades and to drawings and painting in water color of plant forms in the higher grades, and the third ten cards to models illustrating the course in construction and applied design.

On the shelves and tables were displayed a large variety of articles in cardboard and wood constructed in class rooms and in workshops, illustrating the coordination of the work in drawing, construction, and design. The communal models made by groups of pupils of the upper grades represented apparatus of value used in the elementary science lessons. The decorated models represented one phase of the training in art.

Cabinets 21 to 30 included the course of study and syllabuses and written exercises in copy and dictation, composition, grammar, electives, literature, nature study, geography, history, civics, and mathematics.

The space between cabinets 27 and 29 was occupied by three units of class libraries, the first unit filled with typical books for pupils of the third and fourth years, the second for pupils of the fifth and sixth years, and the third for pupils of the seventh and eighth years. The exhibit was designed to give visitors an idea of what the city is doing in the line of class libraries in all of the schools.

Cabinets 31 and 32 and the large show case between them held an exhibit of the work of the New York City Training School for Teachers. Cabinet 31 illustrated the course in sewing and cord work, and cabinet 32 a graded course in map interpretation. The show case held teachers' and pupils' outfits in map interpretation and models of trees, roads, rivers, fields, farms, gardens, yards, houses, and villages, made by students in the city training school. Cabinets 32 to 47 included work of the high schools in ancient and modern history, ancient and modern languages, English, commercial branches, bookkeeping, mathematics, physics, chemistry, physiography, biology, and drawing. In the latter subject four cabinets were given to pictorial and constructive lines of work, followed by special art work. Cabinets 48 and 49 were filled with photographs of school

buildings in various stages of completion. These photographs exhibited some of the best types of elementary and high school buildings, internal and external arrangements, floor plans, assembly halls, class rooms, laboratories, libraries, gymnasiums, workshops, school kitchens, baths, hallways, stairways, basement and roof playgrounds, yards, heating, lighting, ventilating, and sanitary arrangements. Cabinet 50 represented various phases of school activities through photographs; also exercises on board the school ship *St. Mary's*. Cabinet 51 presented a view of our school system through a brief history of the public schools of the city for the past fifty years, the organization of the department of education, names of the members of the board of education, committee assignments, superintendents, directors, and heads of departments, powers of each, and statistical tables bearing upon day schools, evening schools, vacation schools, playgrounds, recreation centers, truant schools, nautical school, free lectures, etc. This cabinet also contained circulars and blanks bearing upon compulsory education, child labor, children's court cases, attendance officers, and licensing of newsboys. Cabinet 52 was devoted to a brief sketch of the various teachers' associations, their aim and work. The latter part of the cabinet was filled with illustrations of exercises in blackboard sketching which were given to a class of teachers in an extension course provided by the New York Society of Pedagogy. Cabinet 53 presented a complete view of the free lecture system of the city for workingmen and workingwomen. These courses provide for adult education to a large extent in the form of illustrated lectures and experiments. Cabinets 54 and 55 were filled with sample circulars and blanks used by the several departments in the educational system, by the city, associate city, and district superintendents, by principals, directors and supervisors, by the board of examiners, the auditor, the superintendent of supplies, the superintendent of school buildings, and by the secretary and committee of the board of education. These cabinets also contained questions used in examinations for licenses, minutes of the board of education, board of superintendents, and committees, sample report cards, licenses, diplomas, etc. Cabinet 56 gave a scheme for class-room decoration, following closely the course of study. It presented the purpose of school-room decoration, viz, (1) to make the decoration of a room a unit, the expression of an idea; (2) to use pictures that interest and inspire pupils, and (3) to connect the decoration of each room with the work of the grade, especially in the line of literature and history. It gave a selected list of appropriate photographs to correspond with the general plan of the course of study, as well as a list of selected photographs for special rooms—sewing, music, drawing, geography, history, etc.

The following subjects formed the keynote for class-room decoration in the elementary grades: 1a, Mother Goose; 1b, stories of familiar animals; 2a, fairy tales; 2b, the animals of Aesop's Fables; 3a, Indian Life (Hiawatha); 3b, child life; 4a, myths; 4b, legends; 5a, the children's poet; 5b, the city of New York; 6a, explorers and colonists; 6b, American heroism; 7a, early English history; 7b, later English history; 8a, Shakespeare; 8b, Sir Walter Scott. Cabinet 57, and two glass show cases near at hand, exhibited the work of over 100 kindergartens in drawing, brush work, constructive work, clay modeling, free cutting, folding, mounting, sewing, and cord weaving. The photographs represented the arrangement of various kindergarten rooms, views of games, of children at play and on excursions. The statistics gave a registry of 14,797 children in 434 kindergartens. Cabinets 59 and 60 represented through photographs, charts, and printed material, the well-organized work in physical training in the schools of the city. This consisted of story gymnastics, active plays, indoor games, free-band exercises in class rooms, light apparatus in gymnasiums, school yards, and

assembly halls, heavy gymnasium work, athletics, and the work of the Public School League.

A special section was given to the treatment of defective and diseased children, the physical care accorded them, the examination by a physician, attention by trained nurses, methods of record, report, and classification. The methods of treatment of atypical children—exceptional, backward, or mentally defective—were explained fully.

In nearly all the wall cabinets containing typical papers or other exhibits of school work the first inside page contained a syllabus of the course of study. In this way the general plan and scope of the exhibit was shown to be a gradual and logical presentation of the steps taken in the various grades and subjects in the city's public schools curriculum. Nearly all of the photographs and work represented in the wall cabinets were duplicated in the ninety large albums found on the tables and shelves.

On the wall above cabinets 45, 46, 47 was a large topographical map of Greater New York, 12 by 12 feet, with the school districts clearly outlined.

The public school exhibit from the city of New York received high commendation from all visitors.

CITY OF ST. LOUIS.

BY F. LOUIS SOLDAN, SUPERINTENDENT OF INSTRUCTION.

ORGANIZATION.

The board of education of the city of St. Louis consists of twelve members, who give their services without receiving any salary or compensation whatsoever. Each member is elected from the city at large for a term of six years. Four members retire every second year, and their places are filled by a general election. Vacancies caused by resignations are filled by the mayor of the city. It is a corporation independent of the rest of the city government, and has no official connection with other administrative powers of the city.

The board of education exercises legislative, directive, and supervisory functions. It shapes the policy of the public schools, directs and supervises its officers, and approves or rejects their recommendations. It levies taxes for the support of the schools and for the erection of school buildings. The administrative and executive work is placed in the hands of paid officers, who are elected for a term of years. Officers of the board of education are: A secretary and treasurer, a superintendent of instruction, a commissioner of public school buildings, a commissioner of supplies, an auditor, and the attorney of the board.

The regular meeting of the board of education takes place once a month. The standing committees of the board are appointed annually by the president of the board, and are named as follows: The committee on instruction, on school buildings, on finance, and on auditing and supplies. While the rules of the board vest all executive functions in the salaried officers, each committee has supervisory power over the department indicated by its name.

Printed copies of the reports to be tendered are sent to each member from three to seven days prior to the monthly meeting of the board. The monthly meetings of the board are brief and businesslike.

The annual revenue of the board during the scholastic year 1902-3 was \$2,299,518.68. The greater part of this revenue was derived from the tax levied in the city of St. Louis itself. By a vote of the people passed in November,

1902, authority was given the board of education of St. Louis to levy a tax not higher than 6 mills on the dollar.

There are at present 129 school buildings in the city. There are, however, only 96 schools, since a few schools are conducted in several buildings standing in the same yard. The present type of school building is a two-story building of 18 rooms, with a large kindergarten room attached. Each room in the new buildings is about 25 by 33 by 14 feet in size, and is capable of accommodating approximately 54 children. The average number of children in each room in the city is about 47. There is a separate desk for each child. Both seat and desk are adjustable to the height of the pupil. There are at present 15 fireproof buildings and 60 semifireproof buildings. It is the intention to remodel the old buildings gradually, or replace them with new fireproof structures. With the increase in revenue this may be done in the course of five or six years.

In the purchase of school sites it is the policy of the board to buy large sites—if possible, a whole block of ground—so as to leave room for play and exercise. Once a year the board of education causes a population map to be made. This population map shows the point of the densest population, and the new site is purchased in accordance with the information presented by the map.

From one to eight janitors are appointed to each school, according to the number of rooms. Usually two janitors are required for an 18-room building. The janitors have the care of heating and cleaning the schools. In the large schools, in addition to the regular janitors, a scrub woman is employed, who spends her whole time in cleaning. Under the charter the appointment of janitors is entirely in the hands of the commissioner of school buildings, but the board of education determines their salaries and prescribes the way in which the janitors shall be selected.

All nominations for teachers' positions are made by the superintendent of instruction. The board of education approves or rejects the nominations thus made. All new teachers are appointed for a term of probation. Teachers in the district schools are employed first as substitutes, and fill short temporary vacancies; the successful substitutes are then assigned to fill positions of teachers that are absent for a longer period, and after eight months of probationary work, a substitute, on recommendation of the principal in whose school she has been teaching, is nominated by the superintendent for appointment. The teacher's tenure of office is practically unlimited. A teacher, once appointed, holds her position as long as she is efficient in her work. While this is the practical condition, each teacher, according to the terms of her contract, is appointed for one year only. The board of education does not discharge any teacher unless there is evident cause.

In each school there is a principal, and a number of assistant teachers. The teacher next in rank to the principal in the larger schools is called the head assistant, and takes the principal's place in case of his absence. There is in each school a small number of teachers whose length of service and merit is recognized by a higher rank and salary. They are called first assistants; all the other teachers are called second assistants. The maximum salary of the second assistants is \$700; of the first assistants, \$800, and of the head assistants, \$1,000. The principal of a first-class school receives a maximum salary of \$2,400; the salary of principals of smaller schools is less, according to the number of rooms. Each teacher in the district schools begins at a minimum salary ranging upward from \$420 paid to young beginners. Each year during which a teacher serves adds an advance to her salary until the maximum salary of the grade she holds has been reached. This advance in salary takes place according to a schedule fixed from time to time by the board of education. All the assistant teachers in the district schools are women. A large number of the

principals are men. There are at present in the public schools of St. Louis 1,018 second assistants, 199 first assistants, 49 head assistants, 55 male principals, and 35 female principals.

A teachers' college is established for the training of teachers for the district schools of St. Louis. Graduation from the high school is required for admission to the teachers' college. The course in the teachers' college is two years, devoted to the study of psychology, history of education, principles of education, methods of instruction, and a review of the district school studies. After finishing the teachers' college course the candidate is expected to spend one year as an unpaid apprentice in some district school, in order to acquire the practical knowledge of her duties. Principalships in the district schools and positions in the high schools are filled by examination, which is open twice a year to applicants.

The law of the State requires that separate schools shall be maintained for colored children and white children. Among the 96 schools of the city, there are 13 district schools for colored children. There is also a high school for colored boys and girls, with a course of study similar to that of the white high school. In the colored high school, training classes are maintained for girls who wish to become teachers. All the colored schools are taught by colored teachers. There are 5,698 pupils enrolled in the colored schools.

The studies in the elementary schools are the reading and writing of the English language, arithmetic, geography, history of the United States, the elements of natural science, drawing, singing, and gymnastics. Lessons on the conduct of life are given once a week. Besides the customary reference books a school library for the pupils is found in each school, with not less than 30 volumes of each title. Each large school has a kindergarten attached to it. The age of admission to public schools is fixed by the State constitution, and no child can enter the kindergarten until he is 6 years old. He attends the kindergarten for a half day during a year, and then he enters the elementary school. There are at present 9,911 kindergarten pupils in the city.

High schools, with a course of instruction of four years, are maintained for pupils who have finished the district school work. This course of instruction in the high schools includes Latin and Greek, modern languages, mathematics, the sciences, history, drawing, singing, and gymnastics. Instruction is arranged in certain courses, each course containing a consistent plan of education extending over four years. One of the courses of the high schools prepares the pupil for admission to college or university.

During the winter months the board of education maintains evening schools. The evening school course covers five years—three years of elementary work and two years of high school work. The board of education also maintains a public school for deaf-mute children. The schools are absolutely free. Stationery needed during school hours and all text-books are furnished to every child at public expense.

Attendance at school is voluntary. The total number of pupils enrolled in the schools of St. Louis is 86,484. Of these, 82,459 are enrolled in the day schools and 4,025 in the evening schools. The enrollment in the day schools is divided as follows: Kindergarten enrollment, 9,911; district school enrollment, 69,362, and high school enrollment, 3,186. Boys and girls are instructed together in the same room. During recess the sexes are separated, two playgrounds being maintained in each school. There are 43,189 boys and 43,172 girls in attendance.

The principal has the right to send a child home in case of some important offense, in order to request the parent to call at the schoolbuilding with the child. In cases of very serious offense, or where the ordinary school means have proved unavailing, the principal may send the child away from school. A

written notice of such suspension must be sent by the principal to both the superintendent of instruction and the parent. The parent is then required to call at the office of the superintendent of instruction with the child. As a rule, the child is reinstated in his own school; but in rare cases it seems better to send the pupil to some other school in order to secure to the child the possible advantage of new surroundings.

While the board of education authorizes corporal punishment, it does not encourage it. The matter is left largely to the discretion of the principal.

For purposes of instruction the children in each room are usually divided into two divisions. In each division there are approximately twenty to twenty-five children. While one of the divisions receives instruction the other division is engaged in study or seat work. The two divisions are not of the same grade of advancement, but are usually from ten to twenty weeks apart.

Promotions in the high schools are made semiannually; in the district schools semiannually or oftener. Gifted children can be promoted at any time when their ability to do advanced work is established.

The superintendent of instruction, with the approval of the board, prescribes the course of study and the amount of time allotted to each study. While the course of study is prescribed by the superintendent, it originates largely with the teachers, for its adoption is preceded by previous conferences of teachers and principals, and only after it has been determined by the opinion of the best teachers is it indorsed and promulgated by the superintendent.

The district school classes in the seventh and eighth years of the course receive instruction in manual training and domestic science. In a number of centrally located schools, carpenter shops and rooms for instruction in cooking and sewing are provided. The children from neighboring schools report to these centers and receive about two hours' instruction per week. Special teachers are employed for this work. The boys receive instruction in carpentry and the use of ordinary tools. The domestic science work for the girls extends over two years, and consists of a course in sewing and a course in cooking. Ordinary needlework, including darning, is taught, and easy lessons in the making of garments are given. The taste of the children in the selection of material and the harmonizing of various colors is cultivated.

The lessons in cooking teach not only the practical art but include an elementary course in the chemistry of food, the physiology of digestion, and the hygiene of the home.

The work of instruction in the various schools is constantly supervised by a number of officers who spend their whole time in visiting schools, testing results, and aiding and directing the teachers. There are four assistant superintendents, each of whom visits regularly the schools of a district in the city that is assigned to him. Agreement in the principles to be enforced in school work, and which are necessary for a reasonable degree of harmony and uniformity of supervision is secured by a weekly meeting of the assistant superintendents with the superintendent of instruction, in which the details of the week's work are discussed and a common basis for the supervisory work established and maintained. There are also three primary supervisors who assist the assistant superintendents in their visits to the various schools. They have chiefly the care of the three elementary grades of instruction. The special branches of the department of instruction, such as kindergarten, drawing, singing, and calisthenics are looked after by special supervisory officers, who visit the various schools for the purpose of assisting and directing teachers in their work.

The principal of each school is the chief supervisor thereof, and all recommendations of the assistant superintendents as to work in any school are made after

a conference with the principal. He may spend his whole time in supervisory work in visiting schoolrooms and in attending to the executive work of the school. He is expected to guide his teachers in matters of instruction.

THE EXHIBIT.

To plan and prepare a proper educational exhibit is a task of peculiar difficulty. Education is not an external process. Its chief result is the building of mind and soul. Its chief means is the subtle and gradual influence of instruction and discipline on the growth of childhood. Potent as this influence is, it is so gradual and so much a part of the intangible inner life that the most important part of education can not be made the subject of an exhibit. It is only the external concomitants of the educational process that can be exhibited, such as the methods of teaching that are in use, the work of children in the form of writing or drawing, manual training, school appliances, the books and apparatus in use, and the affairs of administration and management. These, however, merely indicate and do not display the educational condition and progress of a community. The silent processes of gradual transformation of body and soul of the child to stronger manhood and womanhood which education helps to bring about can not be exhibited. All that an exhibit can show is the material environment which the school gives to the pupil, and some of the external results in the shape of the children's work and in pictorial representations of school life.

The general aspect which is given to the space allotted to the St. Louis exhibit is that of a library, well and comfortably furnished, which invites the visitor to sit down and study the exhibit which surrounds him. The space assigned to the exhibit is near the main northwest entrance of the Palace of Education. Entering by the main corridor the space extends along the second aisle at the right, and is located between it and the wall of the interior court. The space is approximately 140 feet long by 27 feet in depth. Across the aisle on the opposite side is the display of the other schools of the State of Missouri.

For the display of the exhibit an artistic plan of an ornamental façade has been adopted. The façade answers several purposes. It marks off the exhibit and makes it, as it were, a room by itself. Designed in the style of the Roman triumphal arch, it enhances the impressive and artistic character of the whole display. On the front and interior side of each arch and also back of the arch, there is a panel of translucent ground glass about 2 by 4 feet in size. Each front panel is filled with a transparency representing some group illustrative of the progress of education in the history of various countries. In one of these panels the Egyptian priest is shown teaching a class of youths in the temple; in another panel the Roman boy is trained in the use of arms; the middle ages are represented by a scene in the schools in the monasteries; in one of the last historical panels Froebel is represented surrounded by his children. On the panels on the interior side and back of each arch, small transparent photographs of school buildings, scenes in schoolhouses, pictures of groups of children, etc., are placed. These glass transparencies are constantly illuminated by electric lights kept burning behind them. In the triangular spaces right and left of the top of the arches facing the aisle, large heads of children are presented in transparent photographs, which like the panels below, are illuminated by electric light.

Near the entrance from the main corridor we find the kindergarten exhibit, and following it, the district and high school work. The pictures of children's heads in the transparencies in the panels and spandrels of the arches indicate and suggest the character of the exhibit found in the space behind them.

The general aim of the exhibit is to give to the visitors and students a complete and systematic view of the work actually done by the public schools of the city and their administrative and financial conditions. There is nothing admitted to this exhibit that is merely decorative. Everything tends to show actual facts, and the mode of presenting these facts makes them at once clear and impressive.

Instruction in the public schools is shown in regard to the range of subjects and the kinds of schools which our public school system includes. These various departments are, therefore, represented as follows: Kindergarten, primary schools, high schools, deaf-mute instruction, evening schools, and teachers' training classes.

The exhibit of the public schools includes: First, the method and work of instruction, with the appliances used, such as text-books, maps, apparatus, and natural-history collections and cabinets used in teaching, together with an exhibit of schoolroom decoration, consisting of pictures and casts as found in and collected from various schools in the city. Second, facts and data concerning the corps of teachers, their training, and the organizations they maintain for professional training and mutual help in sickness and old age. Third, the school buildings of St. Louis, their construction and method of heating and ventilation. Fourth, the school laws of St. Louis and the data and facts of school administration.

The articles displayed in the exhibit of instruction include, in the first place, the work of the pupils themselves, their writing, their essays, and examination papers. All the subjects prescribed by the course of study are represented in this collection. The specimens of the drawing and decorative work, as practiced in all our schools from the kindergarten to the high school, are somewhat prominent in this collection. Specimens of the hand work of the kindergarten, the manual training, and the domestic science classes form part of the exhibit.

The children are not only allowed to exhibit their work in the various studies, they also take part in the decorative "make-up" or presentation of their work. Each class exercise is tied together to form a little book, with cover of heavy colored paper of artistic choice. Each of these books of exercises has a design on the cover page and another on the title page, both the work of the children, and selected unaltered from their best efforts. For the designs on the covers all the talented children of the city competed. There was to be a design for each of the subjects of instruction, such as geography, arithmetic, natural history, etc. Each design was to be in a measure appropriate to the subject. Thus the design for the cover of exercises in arithmetic handed in by some of the children showed a pattern formed of geometrical figures; for the science book a design formed of flowers was selected. A committee of prominent artists acted as judges and selected the best designs offered, which were then photographed and electrotyped and used in the printing of the book covers. Hence, even this decorative feature of the display shows the children's work. A large number of these books, with the best work of the children, both by classes and selected work, has been furnished, so that the display at the exposition can be changed a number of times. Experience has shown that such books, by frequent inspection, are likely to become unsightly, and must from time to time be replaced by new specimens.

The appliances and facilities used in instruction form another department of our school exhibit. A full set of text-books and reference books used in the public schools is shown. A separate bookcase contains the supplementary reading books, of which the board has supplied to each large school from 25 to 30 books of each title. The facilities for supplementary reading which the board of education has furnished have had a very important share in the improvement

of the schools and are therefore represented in the exhibit. There are also specimens of the very numerous collections and sets of books which the public library has been furnishing with the greatest liberality to every school in the city.

In a great many of the schools artistically chosen decorations, statues, casts, original paintings, and reproductions of classic paintings are found. A selection of these schoolroom decorations is displayed in the exhibit as wall decorations, each exhibit of this kind bearing a tablet reading "School decoration taken from ——— school," so that it is evident to the visitor that this is not a piece of wall decoration, but that it displays an actual fact in our school life. A number of collections of fossils, minerals, pressed flowers, mounted birds, etc., such as are found in a great many of the schools, are also displayed. In some of the schools the children raise beautiful moths and butterflies from cocoons, and an excellent mounted collection of these objects of nature is found in the exhibit.

The school life, the recitation-room work, and the playgrounds of the colored and white schools are shown by means of statistics and numerous and well-selected photographs. There are charts of photographs representing the ages of children and the nationalities attending the public schools. Almost every nation of the globe is represented in the public schools of St. Louis.

St. Louis has had the good fortune of having among its teachers and school officers some men and women who have achieved national distinction and whose memory belongs to the public schools and is commemorated by their photographs as part of this collection. Among these eminent people that helped to build the public schools may be mentioned W. T. Harris, formerly superintendent of the public schools of St. Louis; Miss Susan E. Blow, the founder of kindergartens in America; Miss Helen A. Shafer, teacher in the high school, later president of Wellesley College; Mr. William Greenleaf Eliot, president of the board of public schools of St. Louis in 1848 and founder of Washington University; Thomas Davidson, at one time teacher in the high school, then famous as a scholar and a writer and a founder of the Fabian Societies of England. This part of the exhibit also shows the training and organization of the corps of teachers, and the apprentice and substitute system of the St. Louis schools is illustrated by description, photographs, and statistics. The organizations maintained by the teachers are shown by statistics of work done by each, by copies of their constitutions, and by photographs of their officers. The societies whose work is illustrated are the Pedagogical Society, Schoolmasters' Club, Principals' Club, Teachers' Mutual Aid Association, and the Teachers' Benevolent Annuity Association. Some of the artistic and literary work done by teachers forms part of the exhibit.

The location and distribution of public school buildings is shown by maps, and their character is represented by plans and pictures. Photographs show the progress made in school architecture, from the old log hut used as a country school to the magnificent school buildings of the present day. Two of our best school buildings are represented by well-executed plastic models, artistically colored, and made on the scale of one-eighth of an inch to the foot. One of these models represents the recently completed McKinley high school, and the other the modern Wyman school, which is the best type of our new buildings. Large water-color sketches show some of the artistic qualities of the recent schoolroom architecture of our public school buildings by representing the entrance of the Wyman school and the central portion of the future teachers' college as the board of education has planned it.

A model of the portable building is presented. This style of building is used to accommodate an overflow in the attendance in any school. The portable

building is well lighted, heated, and ventilated, and offers very comfortable accommodation for 54 children. The building is composed of sections, and when it has done its service can be taken apart and transported to another school site. The St. Louis style of portable building has been adopted very generally by other cities.

This part of the exhibit includes information concerning ventilation and heating, latrine rooms, and janitors.

The charter of the board of administration, granted by the legislature of the State, is shown in outline on charts exhibiting a tabulated representation of the powers of the board and its organization. The mode of electing the board and the composition of the committees are shown. Other charts present a synopsis of the rules of the board. The functions and powers of the various officers are explained. There are a number of very striking graphical representations on large charts of the financial history and condition of the public schools. The sources and amount of income and the classes of expenditure are illustrated. The system used in the financial department, bookkeeping, accounting, auditing, etc., are exhibited. The statistics of the growth of the public school system form another important division of the exhibit of school administration. Quite a number of graphic representations contain interesting information concerning the school population of St. Louis. A collection of bound volumes of the proceedings of the board in its monthly meetings is presented, and a brief description is given of their mode of transacting legislative business. The administration exhibit also includes the bound volumes of annual reports of the public schools and the printed blank forms in various departments of school administration. There are charts showing the principles and methods observed in the appointment and government of teachers. The courses of study in the public schools form part of the administrative exhibit, because they emanate from the legislative power of the board and its officers. The general statistics of school administration are presented, and a synopsis is given of the progress of the last five years in regard to buildings, free books, teachers' salaries, etc.

The many statistical items which are embodied in a survey of the public schools are represented not merely by figures, but by graphic representation, or, in other words, by drawings, which allow the eye to take in more readily the comparative magnitudes of the enrollment and financial growth, distribution of revenues, and all matters which are less easily comprehended when given in the form of figures.

The photographic part of the exhibit has been made systematic and complete. It describes pictorially all the features of school life, such as school-houses, styles of buildings, equipment of rooms, ground plan of the school, the work in the schoolroom, the classes, the ages of children, their school life, the character of the teachers, etc.

The photographs were taken by some of the teachers in the employ of the public schools, who gave their whole time for several months to this task. A professional photographic assistant was engaged for about five months to assist these teachers.

An effective feature of the photographic display is a set of enlarged pictures, 6 by 3½ feet, which are intended to show certain phases of school life. These photographs are displayed in proper sequence by means of a well devised mechanical contrivance, moved by electricity, which allows each picture to remain in view for a minute, then moves it aside to make room for the next. In this manner a consecutive series of school activities is displayed and simultaneously inspected by a large number of visitors.

At the extreme end of the space allotted to the St. Louis schools, as a crowning feature of the display an actual schoolroom with children at work is exhib-

ited. While ordinary recitation work does not lend itself readily to an occasion where there is the noise inseparable from a large number of visitors and the constant passing of the crowd, there are certain kinds of school work which are not disturbed by these conditions. The features of work which have been selected for this purpose are manual training, domestic science, kindergarten work, calisthenics, drawing, physics and chemistry, and music (including the work for the School for the Deaf and the high school glee, violin, and mandolin clubs). These classes in the St. Louis exhibit report there every day from 3 to 5 o'clock in the afternoon.

The exhibit is so arranged as to present a connected view of the whole of the public-school education of the city of St. Louis. At the entrance of our exhibit space the kindergarten is located, typifying that connection between the school and the home with which all education begins. A Christmas tree, with little colored lights burning all the time, and placed with the work of the kindergarten children, has been placed in the kindergarten section as a fitting initiation of the display. In the adjacent space the work of the district schools and high school work is exhibited. Next to the work of the children comes the space for that part of the display which illustrates the provision which the State makes for the institution and maintenance of education. This exhibit of the legislative and administrative activity of the school board shows the government and the resources of the public schools, and explains the economic and political basis on which they rest.

The department next in sequence covers the external means and agencies provided to carry on the work of education. Schoolhouses and school appliances are presented through models, photographs, and water-color pictures.

The last and culminating point of the exhibit of the board of education is the display of the actual results flowing from the legislative and administrative institution exhibited in the preceding spaces. This crowning step of the exhibit is a class of children actually engaged in school work.



CHAPTER XV.

EDUCATION AT THE ST. LOUIS EXPOSITION—Continued.

II.—TECHNICAL SCHOOLS, ART SCHOOLS, ETC.^a

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BRADLEY POLYTECHNIC INSTITUTE.

HISTORY AND COURSES.

Bradley Polytechnic Institute, Peoria, Ill., founded by Mrs. Lydia Bradley, includes two schools—the school of arts and sciences and the school of horology. The former has a six-year course, covering the work of the high school and the freshman and sophomore years of the college. The result of thus uniting the first two years of the college with the high school has been to place Bradley Institute in harmony with the present university system, as distinct from the older college system.

The curriculum of the school includes courses in the ancient and modern languages, English, history, mathematics, and the sciences, drawing, shopwork,

^a The preceding chapter (the first of this series) treats of the exhibits of the public schools of the United States at St. Louis. Other chapters, in Vol. II of this Report, are devoted to the universities and colleges of the United States, and the educational systems of foreign countries, as represented at the exposition.

and domestic economy. Five groups of studies are open to students: Science, engineering, classics, literature, and the mechanic arts, the latter covering four years instead of six, thus making it a technical course of secondary-school grade.

The school of horology is a trade school for watchmakers, jewelers, engravers, and opticians. It has no vacations. Instruction is individual. Students may enter at any time, and from this school men go directly into positions requiring a high degree of technical skill.

THE EXHIBIT.

In representing the school and its work at St. Louis four methods of exhibiting were employed:

1. Framed photographs, charts, and drawings.
2. Cases for displaying models and the work of students.
3. Wing-frame cabinets for photographs, drawings, written work, and outlines of courses.
4. The "Book of information," containing historical statement, general information, and details of courses.

These four means of exhibiting were unified by an installation that was harmonious in design, each case and piece of furniture having been designed especially for the place it occupied. The installation, as well as the exhibit, was wholly an institute product. Furniture, charts, maps, and photographs were all the work of members of the institute—students, faculty, and employees all contributing.

To study the exhibit to the best advantage it was desirable first to consult the chart giving the curriculum of the school of arts and sciences. This showed, by means of colors, the relation of courses to each other and the proportion of time given to each subject. Next in order came the wing-frame cabinets containing photographs of equipments, outlines of courses by departments, samples of written work, drawing, etc. Turning to the cases, one found the work of departments more fully illustrated by numerous examples of pupils' work. Finally, a study of the "Book of information" gave further details of courses, historic facts concerning the school, and much information of a general nature.

Among the unique features of the exhibit worthy of special notice were (*a*) the six-year curriculum in the school of arts and sciences; (*b*) the display illustrating the equipment, apparatus, text-books, and problems employed in teaching mathematics by the laboratory method; (*c*) the manual-training course in cold metals and its relation to courses in design; (*d*) the jewelry, engraving, and clock and watch work of the school of horology.

The great lesson taught by the exhibit is the feasibility of an enriched secondary-school curriculum, which places manual training, domestic economy, art, and applied science on identically the same footing as courses in ancient and modern languages, literature, history, mathematics, and pure science.

HAMPTON INSTITUTE.

THE EXHIBIT.

Hampton Normal and Agricultural Institute, Hampton, Va., is represented first, by a series of photographs, showing many phases and results of its industrial work, and second, by groups of models from courses in carpentry, black-

smithing, and machinists trades, with accompanying drawings, produced by students.

Hampton Institute was founded for the education of negroes in 1868 by Gen. Samuel Chapman Armstrong. In 1878 Indians were first admitted. The present enrollment is about 725 negroes and 100 Indians.

The fundamental work has always been the training of teachers to go among the negroes of the South and Indians of the West. Industrial training was incorporated at the beginning and has continued a dominant factor. Young men, in going out, are able to influence whole communities toward good homes, while the young women, acting as teachers, do much to raise the standard of living.

A trade school was established in 1896 with three-year courses, in twelve trades. Lessons in agriculture are given to all regular students, and with 750 acres of land ample practical application is offered.

On entering the school each student is allowed to choose his special line of work, but of all a definite amount of academic study is required. Diplomas are given to graduates from a four-years' course in the Academic Department and certificates from a three-years' course in the trades. Special and post-graduate courses are allowed in the normal, agricultural, and trade departments.

One of the unique features of the institute is the wage system of carrying on the ordinary as well as the skilled work. All the cooking, sewing, laundering, farm work, etc., is done by students (under careful supervision) who receive fair compensation to help them defray the expense of board and clothing. No student is required to pay for tuition.

In the trades the greater part of the product is sold, and a regular scale of apprenticeship wages allowed for all labor which produces marketable material.

The school is nonsectarian, but much attention is given to religious and moral training, and it is expected that all who go out from Hampton Institute will do missionary work.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

THE EXHIBIT.

The exhibit of the Massachusetts Institute of Technology at the Louisiana Purchase Exposition was arranged with the idea of showing by means of photographs and drawings the general character of the instruction given in the various engineering departments and in applied science.

Besides the main exhibit of the institute a considerable amount of material was included in the collective exhibit of the Association of Agricultural Colleges and Experiment Stations, chiefly in the departments of architecture, chemistry, and mining engineering.

The floor space assigned to the institute was on one of the main aisles, and in order to increase the amount of wall space and the attractiveness of the exhibit a booth was erected under the direction of the architectural department. The façade of the booth contained two large panels, in which were placed enlarged photographs of all the buildings occupied by the various laboratories. On the exterior of the side wall of the booth was shown some characteristic work of recent graduates, as well as a series of transparencies illustrating the Flagstaff (Ariz.) observatory of Prof. Percival Lowell, non-resident professor of astronomy. On three of the four interior walls were hung

enlarged photographs showing students at work in the laboratories and in the field. The remaining wall of the booth was occupied by the exhibit of the department of architecture. Models of the hulls of ships, designed by the students of the department of naval architecture, were placed on the top of show cases which extended around three sides of the room. Inside these cases were shown blueprints illustrating the original work of students of the departments of civil, mechanical, mining, electrical, and chemical engineering. On four large tables were placed albums in which the detailed work of every department of the institute was illustrated as far as possible by texts and photographs. The publications of the institute were placed on the tables and shelves so as to be readily accessible to visitors. The arrangement of the whole exhibit was an essential part of the architectural exhibit. It was intended that to one entering the portal the whole should be dominated by the bust of President Rogers, and that a hasty glimpse of the interior should convey at once the character of the technical education originated and planned for this school by its founder, William Barton Rogers.

The drawings in the exhibit of the department of architecture were the work of the students in composition, as required in planning and designing interiors and exteriors. The system of instruction is based on that of the *École des Beaux Arts* at Paris, but the problems given to the students are thoroughly American in character, and similar to those that they will meet in actual practice. This department of architecture is the pioneer of the numerous schools now established at American colleges.

The naval architectural exhibit consisted of drawings and models made by students during their third and fourth years. The drawings shown consisted of ship lines, general arrangement, and midship sections. The models were of merchant vessels, sailing yachts, and war ships. The merchant vessels were made by students in the fourth-year class from lines of their own design. The yachts, two in number, were made by third-year students, and the war ship, only one being exhibited, was the work of the young naval constructors sent here from Annapolis by the Navy Department to study war-ship design. All these models were made from lines and plans designed by the students who made the models. The tracings showed a part of the plans of the vessels designed in the regular course of instruction. The album contained a description and schedule of the course, together with photographs of the rooms, thesis work, and apparatus of instruction.

The album of drawings from the mechanical engineering department presented a considerable mass of material, exhibiting the work of a large number of students, including dimensioned shop or working drawings made from machinery, boiler drawings, and problems in mechanism design, such as the design of cams, quick-return motions, gear teeth, simple and double valves for steam engines, and other designs supplementing the lecture courses. This collection showed not only the skill attained by the students, but the method of teaching. With each problem were exhibited the data sheet and the instructions from which the student worked. An album of log blanks of the engineering laboratories gave sample log sheets for tests on the apparatus of the laboratories, and calculation blanks that are used by the students, together with a brief statement of the method of conducting laboratory practice.

In the exhibit of the department of chemistry and chemical engineering it was intended that the material presented from each branch of the department should show the object of the courses of instruction, the methods of presentation, and the results obtained. The labels, both group and specimen, were made as complete as possible in order that the story might be easily followed. In qualitative analysis the range of the work was shown in a general way by

exhibiting a notebook containing notes made in a typical analysis, and also by exhibiting specimens of the subjects actually analyzed by two students. In quantitative analysis much the same method was used. The emphasis laid upon special topics, such as the necessity of careful sampling, was shown by a section of segregated steel rail, on which was marked the analysis of the different parts. In proximate analysis the general character of the course was shown by a full analysis of asphalt and the interpretation of the results, while in sanitary analysis a full set of field apparatus for water analysis was shown with the chart, indicating the methods of use, together with typical specimens of water examined and reported upon by the students. The exhibit relating to the laboratory instruction in the preparation of organic compounds, and the methods employed for the identification of such compounds, was prepared in much detail and illustrated. The course given at the institute is unique in its character and merited detailed presentation. The illustrative material for two lectures on industrial chemistry was shown, indicating how this branch of instruction is conducted, while the methods of instruction employed in the industrial chemical laboratory, since they lent themselves easily to the purpose, were somewhat elaborately illustrated. The method of carrying on the work was shown by representing specimens of raw material, then a photograph of the apparatus used, a working drawing (blueprint) of the apparatus designed for the experiment, and the entries in the student's notebook. At the end was shown a report of the whole experiment, giving cost sheets, estimate, and conclusions and recommendations. Other branches of the departmental instruction, such as sugar analysis, were similarly illustrated, and albums containing typical views were open to inspection, together with copies of the more important of the published works of members of the instructing staff.

The album for the course in civil engineering dealt principally with the problems of railroad location and structural design. Fourth-year bridge design was illustrated by many examples of original work by the students. The course in sanitary engineering was illustrated by designs for sewer sections and sewerage systems. There were also diagrams of hydraulic measurements made at Lowell, Mass., and elsewhere.

The album of the mining engineering department contained many photographs of the laboratories, showing the assaying room and the furnace room with all their different types of furnaces, the milling room with the gravity stamps, Frue vanner, and end-shake vanner, and the many individual machines for studying the principles of concentration of ores. There were also photographs showing the apparatus for studying chlorination, cyaniding and pan amalgamation. The summer schools, which have visited mines and furnaces in Michigan, Illinois, Ohio, Pennsylvania, New York, New Jersey, Province of Quebec, Nova Scotia, and Cape Breton, were fully illustrated.

The album of the department of physics was devoted to photographs showing in detail the equipment of the laboratories of general physics, electrical measurements, heat measurements, acoustics, physical chemistry, electro-chemistry, and the physical library.

The album of the department of electrical engineering contained views of the large laboratory of electrical engineering, the standardizing laboratory, photometer, research and lecture rooms, and other photographs illustrating details of the methods of instruction and individual pieces of apparatus.

The album of the department of biology contained photographs of the laboratories of general biology, bacteriology, comparative anatomy and physiology, the library, the research laboratory, shop, and preparation room.

The album devoted to the work of the department of geology and mineralogy contained descriptions of the courses of instruction designed especially to meet

the needs of students in mining and civil engineering, chemistry, and biology, and also outlined a course of study for those who desire a more purely geological training, particularly along economic lines. There were photographs of lecture rooms, laboratories and their equipments, and several examples illustrative of the work done by students in the department, such as geological maps and sections.

PRATT INSTITUTE, BROOKLYN, N. Y.

BY ARTHUR L. WILLISTON.

THE EXHIBIT.

This exhibit was planned to show by charts and photographs and typical examples of students' work the scope and character of the instruction given at Pratt Institute; in brief, to describe an institution established to promote industrial education and to encourage the application of art and science to industry.

The examples of students' work were exhibited to show how successful the work of the institute had been by following its very simple pedagogic creed, which, briefly stated, is this:

"Show men *how* to do something, and insist that they do it as well, as honestly, as economically, and as beautifully as it can be done—a rule to cover the conduct of all practical work.

"Show men *why* certain definite combinations of effort and material secure certain definite results, and insist that they grasp these simple fundamental principles and apply them for themselves—a rule to cover the conduct of all scientific and theoretical work that underlies the practical."

The photographs of buildings and equipment were exhibited to show, as far as possible, the means and the methods that the institute had used to reach these results.

The seven buildings of the institute, with a floor space of more than 175,000 square feet, were shown by large photographs on the fronts of the wing frames in the center of the exhibit. Smaller photographs arranged in a frieze around the wall showed, in addition to the reading rooms and the lecture and recitation rooms at the institute, classes at work in laboratories, shops, or work-rooms.

The institute endowment funds amount to \$2,500,000, and the buildings and grounds are valued at \$1,235,000. The expense of operating the institute last year was \$252,327.62. The income from tuition was \$82,208.84, leaving a balance of \$170,118.78, which was made up by the income from the endowment fund, and by several special contributions.

The exhibit showed the work of the institute classified under the following main heads: (a) Industrial education for men, (b) industrial education for women, (c) art education for men and women, (d) special education for teachers, (e) preparatory education for boys and girls, (f) department of libraries.

Industrial education for men.—The portion of the Pratt Institute exhibit which was devoted to this subdivision of work was intended to illustrate as clearly as possible, in the small space that could be allotted to it, the following things:

First. By charts and statistics it was intended to illustrate the scope and practical character of the two day courses intended for the training of men for positions of the grade of *foreman* in mechanical and electrical lines, the experience

and earnest character of the men who apply for admission to these courses, and the responsible positions which they obtain after graduation.

Second. By charts and photographs it was intended to illustrate the nine evening technical courses, which are intended for men employed in practical lines of work during the day. These included the following branches: Technical chemistry, applied electricity, steam and the steam engine, strength of materials, physics, mechanical drawing, machine design, mechanism design, and practical mathematics.

Third. By examples of student work and by photographs were illustrated the practical character of work, the high standard of skill in both the construction and finish, and the commercial methods employed in the evening trade courses in machine work, carpentry, pattern making, sign painting, fresco painting, and plumbing.

Fourth. Photographs and sample pieces of apparatus were shown to illustrate the nature and amount of the equipment which has been especially designed by instructors at the institute.

Fifth. Mimeograph texts and sample notebooks were exhibited to illustrate the original methods that have been employed by teachers at the institute.

The methods of instruction which were here illustrated, together with the methods which the teachers at the institute have employed for keeping the individuals in a class, all having a common purpose, but having quite a varied previous training and natural aptitude for their work, all interested and busy—each one accomplishing as much and advancing as rapidly as his individual abilities will permit—without allowing them to become so widely separated in their work as to make effective class instruction impossible, included some of the most important lessons taught by this portion of the exhibit.

Sixth. By tables and charts showing the growth of industrial education for men at the institute, the exhibit was intended to make manifest the great demand for trade and elementary technical education in America and the need for the establishment of more schools to undertake the same kind of work that is now being done at the Pratt Institute.

Industrial education for women.—By the same general method described under the head of industrial work for men, the exhibit exemplified the industrial work given by the institute for women. The work exhibited was planned to illustrate the following branches for women: Costume design, sewing, millinery, dressmaking, embroidery, and domestic science for dietitians, matrons, housekeepers, and probationary nurses.

This portion of the exhibit also illustrated the work of the evening classes in sewing, dressmaking, millinery, costume design, cookery, serving, and laundry work, and showed by charts of the courses of study and by examples of students' work how women employed during the day can, in these evening classes, advance themselves along the line of their regular work and fit themselves for better positions.

Art work for men and women.—The frieze about the top of the main exhibit, and the collection of studies shown in the art annex across the aisle from the main exhibit of the institute, showed typical examples of work done by students in the department of fine and applied arts, and the large glass case on the main aisle contained a large collection of art metal work designed and executed by the students of the same department. These examples of students' work were supplemented by photographs of the studios and workrooms, by charts showing the courses of study, and by statistical records of the work of the graduates. The courses exhibited included those in illustration, life and portrait work, design and architecture, chasing, jewelry, and diesinking, and evening courses in free-hand drawing, life drawing, design, architectural drawing, wood carving, chasing, jewelry and diesinking, and clay and wax modeling.

Special education for teachers.—This exhibit showed by photographs, charts, notebooks, examination papers, and students' work the character of the equipment in the laboratories and workrooms, the scope and aim of the courses of study, the methods of instruction, and the development of the individual student in the courses for the training of teachers in the fine arts, the fine arts and manual training, domestic art, domestic science, and kindergarten work. It also contained records of the practice teaching done by the normal students and records of their work after graduation.

Preparatory education for girls and boys.—This exhibit showed by photographs the equipment of the high school building, and by charts, notebooks, and students' work the high school course of study, the methods employed, and the results obtained from the students.

The library.—The library exhibit included specimens of work done by the students in the library school, which offers two one-year courses for the training of librarians, and charts and statements illustrating the methods of work in the Pratt Institute Library of 77,126 volumes.

PURDUE UNIVERSITY.

THE EXHIBIT.

The exhibit of Purdue University occupied a booth 20 by 27 feet in area. The plan of the exhibit was to project a few notable features of the work of the institution in education and research, rather than to attempt a complete exposition of the university. The exhibit was designed and installed by members of the faculty and employees of the institution.

A frieze of large photographs decorated the walls of the booth on three sides and showed the external characteristics of the buildings and grounds. The library case at the rear of the booth contained complete files of all official publications, of student publications, and representative specimens of writings of members of the faculty. A valuable feature of the exhibit was the collection of manuscript volumes setting forth full information as to the courses of instruction in all important subjects of the curriculum. These volumes described in detail all the features of the methods of administration of classes, departmental equipment, the scope and character of the teaching, with specimens of student work, taken from the current files. To the educator these volumes were the most valuable features of Purdue's exhibit.

In ten handsome cases were collected materials illustrating notable features of the work of various departments. From the material-testing laboratory was shown a collection of objects and photographs illustrating work performed in classes, as well as research in testing all kinds of constructive materials, notably concrete. There was a case displaying typical theses prepared by students in each school as a prerequisite to graduation. Another case was devoted to an interesting and unique series of models representing higher mathematical studies with relation to their application in engineering.

The department of biology supplied a case showing valuable research work in determining the microscopic structure of different varieties of timber as bearing on their economic value, this being illustrated by a series of unique photographs.

In practical mechanics were displayed series of specimens and photographs illustrating the methods and sequence in instruction in shop practice and drawing as a training for the engineer in the principles of mechanical construction.

Agriculture was represented by a case of charts, photographs, and apparatus showing the results of studies in sugar-beet culture and soil characteristics in the State; also methods of instruction in soil physics.

The department of engineering design presented a large collection of selected drawings and designs executed by students, including maps and designs for machines, bridges, railways, etc.

In physics and chemistry there was a case of photographs, models, and materials illustrating courses and methods of instruction. Methods of administering engineering laboratory instruction were shown in detail by collections of forms, reports, data sheets, and theses.

An attendant was present with the exhibit during most of the period of the exposition, and a register was provided for the names of visitors.

RENSSELAER POLYTECHNIC INSTITUTE.

THE EXHIBIT.

The exhibit of the Rensselaer Polytechnic Institute at the Louisiana Purchase Exposition consists of photographs showing the work of graduates and drawings, maps, and graduating theses illustrating the work of students.

The photographs of the work designed by or constructed under the supervision of graduates illustrate some of the most notable engineering achievements both in this country and abroad. These include the longest suspension bridges, and many of the largest steel arch, cantilever, swing, and simply supported truss bridges ever built. There are also many views of large industrial plants, high office buildings, war ships, dry docks, steam and electric railroads; and the Ferris wheel, first erected in Chicago, is an unique example in engineering.

Undergraduate work is illustrated by many bound volumes of drawings and maps. These drawings were selected from the regular class-room work, and the endeavor was made to have the work of as many different students as possible exhibited, thus showing the average quality of the drawings as well as the number required in each course. The bound volumes of graduation theses illustrate the variety of subjects selected by the students, and cover designs for bridges, waterworks, sewerage systems, power plants, and railroad and municipal improvements.

MANUAL TRAINING SCHOOL OF WASHINGTON UNIVERSITY.

BY DR. C. M. WOODWARD, DIRECTOR.

HISTORY AND ORGANIZATION.

The charter of this school was adopted June 17, 1879. The school opened in September, 1880.

The object of the school was threefold: (1) To furnish a more appropriate foundation for higher technical education; (2) to serve as a developing school where pupils could discover their inborn capacities and aptitudes; (3) to furnish to those who look forward to industrial life opportunity to become familiar with tools, materials, methods of construction, and exact drawing.

The organization of the school was unique. It was of high school grade, and the course of study covered three years and was distributed daily along the following lines: Mathematics, one hour; science, one hour; language and literature, one hour; drawing, one hour; tool work, two hours.

The three academic lessons were to be learned at home. After several years' experience the "hour" was reduced to fifty minutes, and after still more experience the course was extended to four years. The drawing is both free-hand and instrumental. The tool work includes joinery, wood carving, wood turning, pattern making, and molding, forging, and bench and machine work in metals.

THE EXHIBIT.

The exhibit is taken from the regular work of the school. With the exception of one drawing, none of it was made for exhibition.

No attempt is made to exhibit the work in mathematics or language. The exhibit in science is confined to first-year work in botany and zoology.

In drawing, as a rule, the work of four students is exhibited in each grade and kind of work. With one exception, all drawings were made from objects placed before the student or they were conceived in the mind. The exception is that of a pen-and-ink drawing enlarged from a printed cut, the purpose being to illustrate the method of handling material and of producing results. All drawings are arranged chronologically, and as every student takes the complete course the exhibit shows progress from year to year. All the drawing is educational. It does not follow examples set either by art schools or by commercial-drawing rooms.

Tool instruction is given in classes of twenty-four students each. Tools and processes are taken up in regular order, and the class goes over the fundamental principles as logically as in mathematics. The commercial element is completely eliminated, and usual forms of construction are introduced only so far as they illustrate the best methods and general principles. Each kind of shopwork ends in a project which is intended to embody in an interesting way what has been learned. Accordingly the exhibit is chiefly class work, a sufficient number of duplicates being shown to establish the fact that the class and not exceptional individuals have done the work.

Attention is called to the systematic way in which lettering and projection drawing are taught. The succession of steps in one drawing exercise is shown by four sheets, the first being a free-hand drawing, the second a mechanical drawing of the same object, the third a tracing of the drawing, the fourth a blueprint made from the tracing. This work is done by every student in the class. Free-hand drawing of groups of objects occupies but little time in the school, but every student produces a single sheet, and several of these sheets are shown.

In forging, after the typical processes are mastered, every pupil manufactures a set of steel lathe tools, made according to the best design and tempered for their special work; these tools he carries with him into the machine shop during the last year. The wrought-iron work done by the various pupils is well illustrated by the wrought-iron fence, gate, and arches shown around the exhibit.

No castings are shown beyond those in lead, soft alloys, and plaster. The molding and casting is purely educational, and the casting is done only to show the necessary features of the pattern and the method of molding it.

The lessons taught by twenty-four years' experience can not be exhibited at the fair. The fruit of a judicious and logical course of manual training lies wholly in the physical and mental abilities of the students, who acquire a fair mastery of material things and learn to control and utilize material forces.

The habit of mechanical analysis, which separates a complicated process into easy steps and reduces a complex construction to simple parts, cultivates also the habit of careful choice in the sequence of operations and in the selection of materials. All this is of infinite value in real life, and it goes far to produce clear-headed and far-seeing men in any calling. Nothing is more certain than that the fruit of manual training is in the boy and not in the project. In no instance is the "finished article" allowed to stand forward so prominently as to appear to be the main result. Our experience teaches that time spent in the shop in thoughtful, logical, exact work is well spent; that manual training stimulates an interest in all other studies; that the progress in mathematics, science, ancient and modern languages, and in English literature is none the less in consequence.

WORCESTER POLYTECHNIC INSTITUTE.

THE EXHIBIT.

Worcester Polytechnic Institute, Worcester, Mass., founded in 1865, is an engineering school for the training of mechanical engineers, civil engineers, electrical engineers, chemical engineers, and students in general science.

A prominent feature in the exhibit of the institute was a collection of 84 large framed photographs showing the buildings with their surroundings and the interiors of the various lecture and recitation rooms, laboratories, and workshops. The relative time put upon different lines of work in the five courses was shown by large comparative charts, designed by the department of drawing.

The material prepared by the mechanical engineering department included various articles manufactured in the shops by the students. For example, from the woodworking department various pattern and core boxes; from the forge shop, specimens showing shaping and welding of iron, lathe tools, and work in tempering; from the foundry, a collection of castings illustrating the regular line of student work; from the machine shop, a large number of specimens, mounted in a glass cabinet made in the shops, illustrating plain and taper turning, spur, bevel, and worm-gear cutting, spindle for sensitive drilling, square-thread cutting, and inside threading, tool making, including construction of reamers, milling cutters, and standard gauges, parts of a regular speed lathe, and a complete bench-drill grinder. The mechanical engineering laboratories exhibited various broken specimens of steel, wrought iron, and bronze, illustrating strength of materials in tension, compression, and torsion. Metallography was illustrated by four groups of micro-photographs of cast iron, wrought iron, and steel. Practice in drawing was represented by the drawing-board work of the free-hand, mechanical, machine-drawing, and descriptive geometry courses, illustrating the training of the imaginative faculty as applied to designing, the acquisition of correct ideas of form, and the solution of engineering problems. That portion of the student's work in the department of civil engineering for which drawings are required was represented by examples of topographical maps, railroad maps and profiles, stress sheets for roofs and bridges, and designs of masonry, wood, and steel structures.

The chemical department displayed 24 beautifully crystallized specimens of pure chemicals, put up in 2-pound bottles. These chemicals were prepared in the laboratory of industrial chemistry from crude materials and waste products from the laboratories and various industrial processes. Accompanying these

specimens were bound copies of student reports, showing that in the manufacture of these chemicals the processes are conducted with as strict adherence as possible to the methods employed in commercial plants and that the cost element is carefully considered. The department of physics was represented by a new and, for the most part, original set of models recently designed and constructed by the department to illustrate a unique set of exercises for a laboratory course, which is intended to replace the somewhat unsatisfactory lecture and recitation course in elementary college physics.

THE ART INSTITUTE OF CHICAGO.

BY W. M. R. FRENCH, DIRECTOR.

THE EXHIBIT.

The exhibit of the school of instruction of the Art Institute of Chicago embraces, in brief, work from departments of drawing, painting, sculpture, decorative designing, architecture, illustration, normal instruction, and, in a limited degree, applied arts, pottery, ceramics, and metal work. It includes a representation of evening and juvenile classes. The academic drawing and painting are illustrated by original studies from the cast, from objects, and from life (the last portrait, nude, and costumed), accompanied by exercises in artistic anatomy, pictorial composition, illustration, and other studies appropriate to the artist. A frieze representing children at play, painted by the students for a public school in Chicago, crowns this part of the exhibit. The department of decoration is shown by original designs and exercises of many kinds; that of sculpture, by a few busts and figures, but more fully by photography.

The exhibit is much amplified by drawings and photographs exhibited in large bound volumes. It is in these books that the work of the normal department and of the juvenile classes is found.

The great Saturday juvenile classes, numbering about 300, are a peculiar feature of the school, and it is from this school that the colored-chalk drawing from objects on gray paper, so much used in the public schools of Chicago and now adopted elsewhere, originated. The normal work resembles closely that of the other well-known normal art schools, but the close association with an academic art school of the first class is reckoned a great advantage, since one of the best qualifications of a teacher of drawing is to be able to draw. It is in connection with the normal work that the applied arts find their chief use.

The sculpture department claims to be the most thorough and practical in the whole country. The students not only follow the usual routine of academic modeling of head and figure, and the composition of small groups, but compose and model draped figures, set up their own armatures, execute large figures, cut marble, and, in general, perform the practical work of the studio. The importance of the work executed is shown by the photographs. The academic drawing, in charcoal from cast and life, is believed to be unsurpassed by students of like experience.

The best claim of the art institute, perhaps, is its comprehensiveness. The various departments react favorably upon each other, and the collateral privileges, such as the art library, the permanent collections, the various and extended lecture courses, the successive passing exhibitions, create an atmosphere most favorable to the development of the student.

MASSACHUSETTS NORMAL ART SCHOOL.

THE EXHIBIT.

[This school made two exhibits—one of its general course of instruction in art, the other of the work of those pupils in the school who are preparing themselves for teaching or supervision. The former exhibit was placed, with those of other art schools, in the southwest corner of the Education building, and was composed of some 300 drawings and paintings from objects, from casts, from the antique, and from the human figure, with numerous busts from the class in sculpture, and objects of interest and beauty from the "arts and crafts" class. Of the second exhibit the principal, Mr. George H. Bartlett, writes as follows.]

The exhibition of the public school class of the Massachusetts Normal Art School represents but a small part of the year's work, and yet it is the expression of the thought of the whole year.

On entering this class the pupil has had a thorough technical art training of three years (as shown in the exhibit of the academic work of the school), during which time he has labored from the standpoint of the pupil. Now he is to become a teacher. His first effort is to get in touch with the principles of teaching.

To learn how to teach, how to select from the great storehouse of art that which is best to teach and to adapt this to the various grades from the kindergarten through the high school, become his especial study for the year.

To teach the pupil to think definitely and to broaden his understanding of the subject, he is given the problem of planning and of illustrating a limited number of lessons, adapting the thought and the rendering to the grade under consideration. The graded illustrative work seen in the exhibition is the direct result of this effort, the exercises being the ordinary certificate work of the students and not made especially for an exhibit. Simple practical lessons in the various branches of art are here shown, each subject being traced in a sequence of steps from the lowest to the highest grades.

To one familiar with drawing in the public schools it is apparent that skill in the use of the pencil and of the brush in water color is most essential to the drawing teacher. To further this end throughout the year emphasis is laid on work especially in these two mediums, and as much time as possible is given to secure good simple pencil rendering with an appreciation of values, and in water color to secure pure color and direct handling.

Another essential in the education of a drawing teacher is skill in blackboard drawing, and practice in this mode of expression is given throughout the course commensurate with its importance.

The suggestions for high school lessons in the exhibit show advanced work in the various modes of rendering, yet an especial effort has been made to so closely connect the first-year lessons with those of the highest grammar grade that no break should be made, but that the work in the high school should begin on the old familiar lines.

In the apportionment of subjects the thought throughout has been to make a well-balanced whole, giving sufficient place to those subjects which, though not so attractive, are necessary to general knowledge, yet recognizing the fact that the greater interest a subject possesses the greater is its capability for developing power.

THE MINNEAPOLIS SCHOOL OF FINE ARTS.

BY ROBERT KOEHLER, DIRECTOR.

THE SCHOOL.

The school at present embraces two departments, the academical and the practical design.

The first includes preparatory and advanced antique, sketch, still life, portrait, and life classes, in session five days each week during the winter term of eight months. On Saturday forenoon there is a special class for children. The school is open to beginners and advanced students. No time limit is set for the course of study and no diplomas are issued in this department. There is also a regular summer term of two months' duration.

Work in the design department constitutes a course of three years and embraces the study of plant forms, historic ornament, and lettering, and their adaptation to practical purposes in the design of furniture, interior decoration, textiles, book illustration, embroidery, etc.

Advanced students desiring to qualify as teachers are given an opportunity to gain experience as assistants to the director in various classes.

THE EXHIBIT.

The exhibit was selected with the object of demonstrating the general character of the work performed.

The work displayed showed a great variety of treatment, the result of the policy pursued to encourage the development of individuality in the pupils. With correctness and simplicity in drawing as fundamental principles, students are given every encouragement to follow out methods of treatment of their own. Likewise in composition, the practice of which is required from the beginning, students are given the widest scope for expressing their ideas.

It is claimed that the advantages offered to art students by a smaller school are easily apparent, and that a thoroughly sound foundation for the study of art is more readily obtainable in such a school, where personal interest in his pupils on the part of the instructor is one of the important factors.

SCHOOL OF THE MUSEUM OF FINE ARTS, BOSTON, MASS.

BY THOMAS ALLEN, CHAIRMAN OF COUNCIL.

HISTORY AND WORK.

Founded in 1876 as an appendage to and occupying rooms in the museum for the purpose of encouraging education in the fine arts, the school maintained a separate existence until 1902, when it was incorporated as part of the Museum of Fine Arts. It is administered by a council of fifteen members, which is composed of representatives of the trustees of the museum, artists, and art workers.

Under a competent corps of instructors the school offers instruction in draw-

ing, painting, modeling, and in decorative design, with supplementary courses in anatomy and perspective. The average number of enrolled pupils is something over 200.

In the department of drawing and painting the instruction includes drawing from the cast under Mr. Hale, from the nude under Mr. Benson, painting from still life and from nude and draped models under Mr. Tarbell and Miss Hazelton. Pupils are promoted from one class to another as soon as their proficiency warrants it. In the department of modeling, under Mr. Pratt's instruction, pupils are taught to model the human figure in clay, both singly and in composition. In the department of design, under Mr. C. Howard Walker, assisted by Miss Child and Miss Maguines, instruction is given by means of problems, which are criticized and corrected, and by lectures. The general principles of planning, of ornament, and application of ornament to material, and the principles of color harmony and contrast are taught in relation to all varieties of design. The purpose is to give a training which will fit a pupil to enter the field of design with a knowledge of the fundamental principles of design and an ability to apply this knowledge in practice.

THE EXHIBIT.

The exhibit of the museum school at the Louisiana Purchase Exposition at St. Louis was selected and arranged by each instructor in his own department. Mr. Tarbell's classes sent 53 oil paintings, portrait studies, and full-length studies from the nude, and 2 pastels. Mr. Benson's classes sent 56 drawings from the nude, Mr. Hale's class 52 drawings from the antique, Mr. Pratt's class 4 figures and 4 bas-reliefs in plaster. Mr. Walker's three classes sent 120 designs selected to include as large a range of subjects as possible. In all, the school makes something less than 300 separate exhibits. The whole exhibit was arranged and installed at St. Louis under the supervision of Mr. Philip L. Hale, instructor of drawing at the museum school, and the council voted to expend a sum not to exceed \$400 to cover all expenses.

ST. LOUIS MUSEUM OF FINE ARTS.

BY THE DIRECTOR.

HISTORY AND WORK.

The St. Louis School of Fine Arts has been the art department of Washington University since May 22, 1879, and was established for the purpose of "instruction in the fine arts; the collection and exhibition of pictures, statuary, and other works of art, * * * and in general the promotion by all proper means of æsthetic or artistic education."

The system which has been adopted in the school work is based on the idea of the universality of art; that is, it is limited to no material or product. The commonly accepted division of art into fine art and industrial art is not recognized. It is believed that no difference should be made between artists except by the measure of inspiration shown in their work. Upon these lines the work of the school has been gradually and steadily developed. Whereas at first the instruction was limited to modeling, drawing and painting from casts, still life, and the living model, instruction is now given in design (for fabrics, tex-

tiles, wall paper, ceramics, tiles, book covers, book plates, etc.), ceramic decoration, pottery, book-binding, modeling for ornamental purposes, and illustration.

It is continually impressed upon the student that drawing, modeling, or color is the true basis of all successful art work. They are urged to devote a part of their time to the serious consideration of these branches of the arts, and their knowledge of the technical side of their work is broadened by illustrated class lectures on art development and kindred subjects.

THE EXHIBIT.

The collection shown in the Palace of Education at the Louisiana Purchase Exposition is the selection made from work done by the students within the past three or four years. It has been arranged with a twofold object—first, to show the methods used in developing the student; second, to show the degree of excellence to which the student has attained. Work was submitted for this purpose by all the students in the school, from the juvenile to the most advanced class. From this work the collection was selected by the corps of instructors. A study was often chosen to represent a phase in the development of the student. Thus in drawing, mere outline studies were selected to show the process of construction. In the color and black and white sketch classes, unfinished studies, often mere suggestions, were chosen to illustrate the manner in which final results were brought about. The same process was adopted in the case of all applied art products. Designs of various kinds were taken not so much for their finish as for the knowledge they showed. In several instances a design made in that class by one student was carried out by another, either in the ceramic or bookbinding class. This enabled the students to see the practical results of their efforts in more than one narrow direction. They were enabled to see their weaknesses of design and their weakness of execution on one piece of work.

Both the students in the ceramic class and those in the bookbinding class are urged to use original designs—that is, designs which they themselves have executed. To facilitate this, their time is so divided that they alternate in their studies, devoting part of their time to one field and part to another.

In looking at the result of these methods of work it would seem that the student becomes more practical; that whereas brilliancy and cleverness may count up to a certain degree, method and thoroughness will carry the student further and enable him more readily to enter the practical field of his endeavors.

LUTHERAN PAROCHIAL SCHOOLS.

BY A. KAEPPPEL.

ORGANIZATION.

The Evangelical Lutheran Synod of Missouri, Ohio, and other States is one of the five German synods in the United States forming the so-called "synodical conference." All of these synods maintain schools to provide for Christian instruction. Out of 2,225 elementary schools attended by 111,816 pupils, the Missouri synod alone maintains 1,888, in which 96,193 pupils are instructed by 1,061 pastors, 857 male, and 176 female teachers. Besides these schools for

elementary instruction, which are sustained by the individual congregations, the Missouri synod provides for the higher education in high schools, colleges, and seminaries, maintained, with two exceptions, out of the common funds of the synod.

The synod of Missouri, Ohio, and other States was founded in 1847 by 12 congregations, 22 pastors, and 2 candidates for the ministry. Within these congregations there were at that time 14 common schools, attended by 508 pupils. But previous to the organization of the Missouri synod there were Lutheran schools in this country, even as early as 1734.

While the primary object of Evangelical Lutheran congregations in organizing and maintaining parochial schools is the religious instruction of their children, an equal importance is attached to the fact that the best possible instruction in secular branches must be pervaded by the spirit of Christianity. For this reason synod educates its own teachers, who *make their profession a life's calling*.

The plan of instruction in these schools includes, besides instruction in religion, all the common school branches; German and English, reading, writing, grammar, composition, arithmetic, geography, United States history, physiology, zoology, botany, singing, and drawing. In most of the schools instruction in all the branches, with the exception of religion and German, is given in English.

It is obvious that the standard of these schools varies according to locality and the condition of the congregations supporting them. While some large congregations employ as many as nine teachers, others, especially small congregations in rural districts, must be content with whatever school the pastor can give their children.

Every congregation supports its own schools, either by voluntary contributions or by asking a nominal tuition fee of the pupils. The management of the school is in the hands of a school board elected by the congregation, the pastor acting as inspector or supervisor.

The Lutherans, as good patriots, cheerfully and loyally support the public schools, and deem it the duty of government to provide the very best education for the youth of this country. But they hold it incompatible with the character of public schools to give religious instruction, and much more so denominational religious instruction; and since this is out of the question, Lutherans who contend that there is "no morality without religion" must continue to support and maintain their parish schools out of their own means, asking no aid from government.

THE LUTHERAN EXHIBIT.

When in June, 1902, the synod of Missouri, Ohio, and other States authorized the faculty of the Teachers' Seminary, at Addison, Ill., to collect and install an exhibit of the Evangelical Lutheran parochial schools at the Louisiana Purchase Exposition, the committee was confronted with many difficulties, the chief ones being the newness of the undertaking and the extreme modesty of many teachers.

An executive committee of three, appointed by the faculty, began agitation for the cause by sending circulars to all the conferences, teachers, and congregations in the synod. Several of the larger conferences were visited in person by members of the committee, and teachers and pastors were shown the importance of placing on exhibition the work of the Lutheran schools and urged to combine efforts to make the display successful.

All material used for the work was supplied by the Concordia Publishing House, of St. Louis, and the completed work was sent there, where it was bound in neat covers.

The following was installed as an exhibit in April, 1904 :

Bound volumes of written work.....	739
Bound volumes of drawings.....	72
Photographs of schools.....	309
Large and beautiful collection of insects.....	1
Collection of schoolbooks and helps, compiled and published under the auspices of synod by the Concordia Publishing House.....	1
Leaf cabinet containing specimens of written work.....	1
Leaf cabinet containing specimens of drawing and photographs.....	1
Leaf cabinet containing photographs only.....	1
Leaf cabinet containing specimens of drawings from the Teachers' Seminary, at Addison.....	1
Bound volumes of written work from the same institution.....	10
Bound volumes of written work from the Walther College, at St. Louis.....	4

The school work exhibited was all regular class work, from 80 to 100 per cent of all papers written in the school being shown.

The different branches were represented as follows :

	Papers.
English language work.....	23, 366
United States history.....	2, 929
Geography.....	6, 788
Arithmetic.....	13, 819
Religion.....	7, 022
German language work.....	14, 143

And quite a number of papers showed physiology, zoology, botany, general history, shorthand, and bookkeeping.

THE PHILADELPHIA MUSEUMS.

HISTORY AND ORGANIZATION.

The exhibit of the Philadelphia museums in the education building at the St. Louis Exposition consists of a collection of specimens of commercial materials of all kinds, designed to aid teachers of geography in classes of any grade. The collection contains, primarily, a series of samples of all the more important commercial articles of the world, and the products of various countries which are of actual use and value from a business standpoint. These are shown in series, from the raw state to the finished article, each accompanied by a number of illustrative photographs. The Philadelphia museums are at present distributing five hundred such collections to the public schools in Pennsylvania.

The value of such a collection to a teacher can perhaps best be shown by giving a short account of its development. The progressive teachers of Philadelphia and vicinity, feeling that the teaching of geography could be put on a practical basis only by illustrating the lessons by actual specimens of the products of the various countries, naturally turned to the Philadelphia museums for assistance, knowing that no other institution in the country is so favorably situated for securing such material. Requests for a cotton plant, a cocoanut, specimens of fibers, woods, minerals, and other objects came in constantly. It was soon seen that this was an opportunity for increasing the usefulness of the institution, supplementing its strictly commercial work with the business men by

making it helpful to the schools. Teachers were invited to bring their classes to the museums. A large lecture room was fitted up with typical collections, selected from all of the exhibits in the museums, and lectures and informal talks were given by the director and by members of the scientific department. These talks became very popular, and the lecture room was often crowded by teachers anxious to learn about the world's commerce.

Meantime, other methods of work having the same purpose had been considered. Small collections, illustrating a few of the most important commercial materials, were prepared, and these were loaned to one school after another for a limited time on the plan of a circulating library, thus giving to schools at a distance a share in the benefits to be derived from the collections and making it possible for the teachers to use the specimens in their class rooms.

This method of making the school children acquainted with the important products figuring in the world's commerce was the best that could be done under the circumstances, but it was only the beginning of what was planned. In the year 1900 the museums prepared 250 collections, each containing a more extensive series of samples than had been included in any previous sets. The materials which made up these collections were taken partly from duplicate material in the museums' collection and partly from samples donated for the purpose by wholesale merchants in response to the museums' solicitation. The specimens, representing many of the important commercial products of the world, were accompanied by illustrative photographs, maps, and printed descriptions. These collections were given away free of charge to such schools in the State of Pennsylvania as could use them to advantage and were willing to furnish proper cases and shelving.

The value of the collections from a pedagogical standpoint was at once recognized, and requests were so numerous that they could not be honored. When, a little later, the museums asked the legislature of the State of Pennsylvania for an appropriation to carry on the work the appeal was warmly supported by all of the leading educators, teachers, and members of local school boards. Quick to see the great educational advantages offered to the children of the State, the legislature appropriated an amount of money sufficient to send out 500 collections much more complete than the preceding ones and similar to the one exhibited. Aside from this appropriation the museums furnished freely many of the specimens and much of the labor of preparation.

THE EXHIBIT.

The list of specimens included in the collection was made up with the greatest care, and includes as many of the materials of commerce as it seemed practicable to show. Of course, some of the most important articles, being perishable, like meats, eggs, butter, fruits, etc., could not be exhibited. Specimens are shown from all of the chief commercial countries and of all the important groups of materials, such as foods and food products, drugs, oils, waxes, gums, resins, fibers, fabrics, woods, leathers, tans, dyes, minerals, etc. Wherever it seemed possible a series of products from one source has been shown. Under cotton, for example, will be found a cotton plant, unginned upland cotton, ginned sea-island cotton, brown Peruvian cotton, cotton linters, cotton yarn, cotton rope, unbleached and bleached muslins, Persian lawn, calico, gingham, zephyr gingham, chambray, cotton seeds, cotton-seed oil, cotton-seed oil cake, and cotton-oil soap. Such specimens as could best be displayed in bottles are placed in 8-ounce glass-stoppered jars. Most of the fibers are tied in hanks, each of which can be separated into several small samples to be passed around the

class, while the minerals and many other substances are placed on varnished blocks. The labels all give the commercial name of the product, its origin, its scientific name, the part of the world producing it, and its uses.

Accompanying this extensive exhibit are over 200 photographs illustrating the production, preparation, and transportation of the articles. Each photograph bears on its back a complete printed description, together with information in regard to the commercial importance of the product. Maps of distribution, statistical charts, and a brochure of a hundred pages give supplementary information in regard to the materials.

The collection is intended as a practical help to teachers of geography, commercial geography, and the study of raw materials; and while it contains in itself some hundreds of articles, it finds its greatest usefulness when it serves as a nucleus for a school museum, showing to teachers the kinds of specimens which can be profitably used, and how they can be obtained and exhibited.

The collections are sent free to the schools, freight prepaid, carefully packed in boxes made for the purpose, the exhibition cases being the only expense incurred by the schools. With the collections go suggestions as to the proper kinds of cases and shelving, and best arrangement of the specimens for convenient use.

SCHOOLS FOR DEFECTIVES.

BY A. E. POPE.

THE EXHIBIT.

The most important feature of Group 7 was the living exhibit in the model schools for the deaf and the blind. These schools were located near the east door of the Palace of Education. A high partition separated the schools for the deaf from the schools for the blind. On each side of this partition were six small, three-sided rooms, neatly burlaped and well furnished. The open ends of the rooms faced the main aisles, and a strong railing held back the crowd of visitors.

The most popular classes in the deaf schools were the oral classes, where the little ones were taking their first lessons in speech and lip reading. The visitors could see the difficulties to be overcome and how they were mastered. Here, as elsewhere, the one predominating question, "How do you do it?" was answered. In the adjoining room was an advanced class reciting in language, geography, arithmetic, etc., entirely by lip reading and speech. Further on was a college graduate explaining the objective exhibits, and conversing freely with the visitors, thus illustrating the practical application of the work accomplished in the primary classes.

In another room was a primary "manual" class learning their first lessons in English by the manual alphabet and by writing. In the next room a more advanced class was studying the higher branches by the same method.

Across the aisle were six larger rooms with railings on two or three sides, where the industrial classes worked. There was a class in woodwork, in turning, a barber's class, classes in printing, sewing, tailoring, fancy work, and art. The boys were making their own uniforms, caps, trousers, and coats; the girls cutting and fitting their own dresses. This demonstrated to the public the practical training given to these pupils, making them independent and self-supporting citizens.

The Lewis School for Stammerers was represented by a large class, demonstrating the various and ingenious methods used in this school for correcting defective speech.

One of the most interesting features of the model schools for the blind was the kindergarten class. The circle in which they played was marked here and there by little wooden strips to guide the children and show each his or her standing place. Next was a primary class learning to read and write one of the point systems. To many of the visitors the point systems seemed quite a revelation, as did also the rapidity with which they could be used. There was a more advanced class demonstrating the utility of these methods in studying the higher branches. Special maps and globes devised for the blind were used in the geography class, and the high school class displayed their efficiency in algebra, history, literature, etc. One of the most practical classes was that in type-writing, showing that the blind could take dictation in one of the point systems and transpose it on the machine.

In the industrial department was a sloyd class, where the blind boys were using sharp tools with great accuracy and precision. There were also classes in sewing, basket making, weaving, raffia work, bookbinding, and book making.

The music room was very popular, being well equipped with pianos, pipe organ, and band instruments. Vocal and instrumental solos, duets, and orchestral performances were given at regular intervals throughout the day.

Many of the blind lose their sight late in life, when they are too old and their fingers are too hardened to learn the use of one of the point systems. In order to relieve them of the gloom of solitude and make life more pleasant and agreeable, a simple method of reading has been invented, which was demonstrated by one of the teachers of the Pennsylvania Home Teaching and Free Circulating Library Society.

Three deaf-blind pupils were present at different times. Emma Kubie, aged 8, came from the Illinois School for the Blind. She had been in school only a short time, and the public had an opportunity of seeing the first steps employed in reaching the mind of a child deprived of sight and hearing. She was just beginning to learn the names of objects and to describe actions in sentences of a few words. Lottie Sullivan, aged 18, came from the Colorado School. She represents a further degree of development. All communications were spelled into her hand by the use of the manual alphabet, or presented in Braille or New York point writing. She expressed herself in the same manner, and in addition could use the ordinary typewriter. Her teacher was a deaf lady, so it was necessary to have a third-party interpret. Clarence J. Selby, of Chicago, was still older, and could speak quite fluently. He is the author of many beautiful poems, which he distributed.

All these classes of deaf and blind children were selected from the different schools of the United States, and maintained in some cases at the expense of the State commissions, in other cases at the expense of the schools, or jointly by the schools and commissions.

The following is a list of superintendents and schools participating:

Dr. E. M. Gallaudet, president of Gallaudet College, Washington, D. C.

S. M. Green, superintendent of the Missouri Schools for the Blind, St. Louis.

Noble B. McKee, superintendent of the Missouri School for the Deaf, Fulton.

J. H. Freeman, superintendent of the Illinois School for the Blind, Jacksonville.

C. P. Gillett, superintendent of the Illinois School for the Deaf, Jacksonville.

Lapier Williams, superintendent of the Kansas School for the Blind, Kansas City.

H. C. Hammond, superintendent of the Kansas School for the Deaf, Olathe.

W. K. Argo, superintendent of the Colorado School for the Deaf and the Blind, Colorado Springs.

Frank M. Driggs, superintendent of the Utah School for the Deaf and the Blind, Ogden.

J. W. Jones, superintendent of the Ohio School for the Deaf, Columbus.

R. E. Stewart, superintendent of the Nebraska School for the Deaf, Omaha.

Mademoiselle L. Mulot, Directrice de l'École des Jeunes Aveugles, Angers, France.

Dr. Robert C. Moon, president of the Pennsylvania Home Teaching and Free Circulating Library Society, Philadelphia.

George E. Lewis, president of the Lewis School for Stammerers, Detroit.

All participants in the model schools lived in one of the Washington University dormitories located in the rear of the Administration building. During the five months the schools were in operation there was not a single accident, and little or no sickness. Great care was exercised in the selection of pure and wholesome food. The pupils, teachers, and superintendents had the same fare and ate at the same tables, and any necessary inconveniences were shared by all.

Every morning before school opened the children spent several hours inspecting exhibits in the various buildings. After school the pupils played about the dormitory or went sight-seeing. Two or three evenings each week they visited the Pike, going to the Boer War, Hagenback's animal show, the Galveston Flood, or for a ride on the scenic railway, which they much preferred to giving public recitations.

One or two rooms were set aside in each school for objective exhibits, but the space was so limited that many schools were forced to place their displays with the general educational exhibit of their respective States. Among the most important schools having objective exhibits, in addition to those which have already been mentioned, are the following:

American Printing House for the Blind, Louisville, Ky.

The Texas School for the Blind, Austin.

The Pennsylvania School for the Blind, Overbrook.

The Kentucky School for the Blind, Louisville.

The Massachusetts School and Perkins Institute for the Education of the Blind, Boston.

The New York School for the Blind, New York City.

The German exhibit from schools for the blind.

Portugal's exhibit from schools for the blind.

The Volta Bureau, Washington, D. C.

The Wright Oral School for the Deaf, New York City.

The Horace Mann School for the Deaf, Boston, Mass.

The Arkansas School for the Deaf, Little Rock.

The New Jersey School for the Deaf, Trenton.

The Michigan School for the Deaf, Lansing.

The New York School for the Deaf, New York City.

Germany's exhibit from schools for the deaf.

China's exhibit from a school for the deaf.

The feeble-minded.—Schools for the feeble-minded were classified both in the department of education and that of social economy. Their exhibit, however, was located in the department of social economy, block 5, for the reason that most of the children in feeble-minded institutions receive hospital treatment, and only about one-third take the regular course of instruction.

This was one of the most successful collective objective exhibits ever arranged, and its superiority is mainly due to the untiring efforts of Dr. A. C. Rogers of the Minnesota School. Dr. and Mrs. William H. C. Smith, of the Beverly Farm

Home and School, were in charge of the exhibits. The most prominent schools in the country prepared work under the direction of Dr. A. C. Rogers. He compiled statistics and sorted and arranged the exhibits. All of the different kinds of kindergarten work from these schools were properly labeled, classified, and scientifically arranged regardless of institutions. The large and costly model of the Craig Colony for Epileptics occupied the center of the room. Around the walls were the leaf cabinets containing school work and statistics. The high partitions and one large cabinet held the industrial work.

The schools most prominently represented were as follows:

The Minnesota School for the Feeble-minded, Faribault.

The Indiana School for the Feeble-minded, Fort Wayne.

The Pennsylvania School for the Feeble-minded, Elwin.

The Beverly Farm Home and School, Godfrey, Ill.

The Seguin School, Orange, N. J.

The Polk Institution for Feeble-minded, Venango County, Pa.

Several congresses held at the fair were closely allied to the work of group 7, among which were the following:

The National Educational Association, Department 16.

The Association of Physicians and Superintendents of Institutions for the Feeble-minded.

The Association of American Instructors of the Blind.

The convention of the deaf of America.

The conference of superintendents and principals of American schools for the deaf.

Helen Kellar day.

There were three personal days at the exposition: Helen Kellar day, Roosevelt day, and Francis day. The entire exposition was an educational institution, and as Helen Kellar has won the most remarkable victories in this field she was chosen to represent not only the deaf and the blind, not only the department of education, but the whole process of education.

The following quotation, taken from the Colorado Index, may close most fittingly this brief account of the representation of defectives at the exposition:

"Among all the wonders of the fair, among all the achievements of human genius, among all the evidences of twentieth century civilization, this deaf-blind young woman embodied in herself the most striking features of all, and those who paid homage to her radiantly active soul unconsciously paid homage to the spirit of progress and enlightenment that is the guiding influence of the world to-day."

LAND-GRANT COLLEGES AND AGRICULTURAL EXPERIMENT STATIONS.

BY A. C. TRUE, DIRECTOR OF OFFICE OF EXPERIMENT STATIONS, UNITED STATES
DEPARTMENT OF AGRICULTURE.

THE EXHIBIT.

The progress of agricultural education and research, as developed in the work of the land-grant colleges and experiment stations, was well illustrated in the collective exhibit of these institutions in the Palace of Education of the Louisiana Purchase Exposition. This exhibit, which occupied about 16,000 square feet of space, was planned, collected, and installed by a committee of the Asso-

ciation of American Agricultural Colleges and Experiment Stations, of which W. H. Jordan, director of the New York State Agricultural Experiment Station, was chairman, and A. C. True, Director of the Office of Experiment Stations, secretary, and which included in its membership the United States Commissioner of Education, W. T. Harris. James L. Farmer, chief special agent, had immediate charge of the execution of the plans of the committee.

Centrally located in this exhibit were exhibits of the Bureau of Education and the Office of Experiment Stations, representing the United States Government in its relations with the colleges and stations. Around these were grouped exhibits illustrating the methods, appliances, and results of the educational and research work of the colleges and stations in agriculture and mechanic arts, subdivided according to the main divisions of these subjects. The agricultural exhibits were as follows:

I. Agronomy, or plant production, including soils, in charge of Prof. M. F. Miller, Ohio State University, Columbus, Ohio; fertilizers, Director E. B. Voorhees, New Jersey Agricultural Experiment Stations, New Brunswick, N. J.; plant laboratory, Dr. W. H. Evans, Office of Experiment Stations, United States Department of Agriculture, Washington, D. C.; field crops, Mr. J. I. Schulte, Office of Experiment Stations, United States Department of Agriculture, Washington, D. C.; horticulture and forestry, Prof. S. B. Green, University of Minnesota, St. Anthony Park, Minn.; plant pathology, Mr. F. C. Stewart, New York State Agricultural Experiment Station, Geneva, N. Y.; economic entomology, Prof. Clarence P. Gillette, State Agricultural College of Colorado, Fort Collins, Colo.

II. Zootechny, or animal industry, including animal husbandry (investigation), in charge of Director H. P. Armsby, Pennsylvania Agricultural Experiment Station, State College, Pa.; animal husbandry (instruction), Prof. Thos. F. Hunt, Cornell University, Ithaca, N. Y.; veterinary medicine, Prof. D. S. White, Ohio State University, Columbus, Ohio.

III. Agrotechny, or agricultural technology, including dairy laboratory, in charge of Prof. E. H. Farrington, University of Wisconsin, Madison, Wis.; sugar laboratory, Director W. C. Stubbs, Louisiana Agricultural Experiment Stations, Audubon Park, La.; inspection of foods, feeding stuffs, fertilizers, etc., Director M. A. Scovell, Kentucky Agricultural Experiment Station, Lexington, Ky.

IV. Rural engineering, or farm mechanics. This exhibit has been prepared under the direction of Dr. Elwood Mead, Office of Experiment Stations, United States Department of Agriculture, Washington, D. C.

V. Rural economics, or farm management. This exhibit has been prepared under the direction of Prof. Fred W. Card, Rhode Island College of Agriculture and Mechanic Arts, Kingston, R. I.

CHAPTER XVI.

THE FINAL ESTABLISHMENT OF THE AMERICAN COMMON SCHOOL SYSTEM IN NORTH CAROLINA, SOUTH CAROLINA, AND GEORGIA, 1863-1900.

By A. D. MAYO, A. M., LL. D.

NORTH CAROLINA.

The State of North Carolina in 1870 contained 50,000 square miles of land, or 32,000,000 acres, 6,500,000 of which were cultivated. Its population in 1860 was 992,622, with the promise of 1,000,000 in 1870. The State was 500 miles in length and 100 to 150 miles in breadth. At the close of the war its most important productions were tobacco, sweet potatoes, corn, and a moderate supply of cotton, with vast undeveloped resources in the way of fish and lumber. It was divided into three well-marked sections, the coast, midland, and mountain regions.

But with all this advantage, one of her historians is compelled to say, "it must be acknowledged, and this is stated more in sorrow than in anger, that there is no section of our Union where education has in the past been so neglected as in North Carolina." The State, however, was one of the four Commonwealths of the Southern group which, previous to 1860, had established and supported a system of public schools for its population of the white race. In the seventh chapter of the Report of the United States Commissioner of Education for 1899-1900 will be found a sketch of this movement, which, practically beginning in 1852, under the supervision of Dr. C. H. Wiley, was prolonged even to the close of the civil war, and only suspended by the general collapse that followed the disappearance of the Southern Confederacy.

In 1868, under the temporary government appointed by President Andrew Johnson, an attempt was made at taking a census of the school children of the State, who are reported as numbering 330,581 (223,815 white and 106,766 colored). The whole number of schoolhouses reported was 1,906; of them, 178 are characterized as good and 685 as bad. Under the law of 1869 the public school money was to be distributed by the superintendent of public instruction in proportion to the number of children of each county. The sum of \$100,000 was appropriated by the general assembly, and it was the opinion of the State superintendent, Mr. S. S. Ashley, a gentleman called from a Northern State, that the avails of the capitation tax would supply an equal sum. In 1869 \$165,230.50 was apportioned among the several counties, allowing 59 cents per census child. The State university, one of the oldest of this type of institutions in the Union, reported 35 students in attendance, a president and 5 professors, and 25 students in preparatory classes. The different churches from the North, interested in the progress of the colored children and youth, had already established a dozen or more seminaries in as many of the larger cities of the State. Several of

these had erected large buildings and were expending considerable sums of money. The Friends were especially active in this direction, and were supporting 25 schools, with 37 teachers and 2,475 pupils. Some 15,647 colored children and youth were being educated in this way in 2,527 schools. Seven institutions of the higher education were still in operation, of which the State university and Davidson and Trinity Colleges were the most important, and a large number of academies, with which North Carolina had been liberally supplied, were resuming the work interrupted by the civil war. In 1870-71 Superintendent Ashley reports an appropriation of \$152,281.82, of which \$115,042.57 had been collected; 1,398 schools had been kept open in 74 counties; 250 of the 800 townships in the State had made reports.

The original brief constitutional provision of North Carolina, of December, 1776, repeated in the constitution of 1835, was supplemented by the new government by an elaborate constitutional provision, providing for a superintendent of public instruction to be elected for a term of four years, with duties prescribed by law, and who should be a member of the council of the State. The general assembly was required to provide for a general system of public schools, with free tuition to all children between the ages of 6 and 21 years. Every county was to be divided into a convenient number of districts, in which a public school should be maintained at least four months in the year. An irreducible educational fund was to be established, consisting of what remained from the original fund, largely dissipated during the civil war, together with the proceeds of the sales of swamp lands and moneys collected from various other sources. The university was to be connected with the free public school system of the State, and as far as possible instruction was to be free of expense for tuition. The governor, lieutenant-governor, secretary of state, treasurer, auditor, superintendent of public works, superintendent of public instruction, and attorney-general constituted the State board of education, empowered to make all needful rules and regulations for public schools, subject to the revision of the general assembly. The board of education could elect trustees for the university, choosing one trustee from each county, with term of office of eight years. Provision was made for establishing in connection with the university departments of agriculture, mechanics, mining, and normal instruction. The general assembly was empowered to enact that every child of sufficient mental and physical ability should attend the public schools during the period between the ages of 6 and 18 years for a term of not less than sixteen months, unless educated by other means.

Under the provisions of this constitution a school law was passed by the general assembly in 1869. The difficulties attending the establishment of such a system as contemplated can be appreciated from the fact that of the 90 counties of the State 37 had a population less than 10,000 and 9 less than 6,000. Of these, only 30 counties had made reports to the superintendent. In 1870 the general assembly appropriated \$90,493 in addition to the \$115,042.57 raised by the State and county capitation taxes; 1,398 public schools had been reported as opened, estimated at 1,415 in all; 74 of the 90 counties and 250 of the 800 townships had reported. The school attendance was estimated at 49,000—35,000 white and 14,000 colored. There were 1,400 teachers at work on an average salary of \$20 per month. There were 709 schoolhouses. Of the academical schools reported as still existing in the State the most important was the Bingham School, located at Mebaneville, in the coast region of the State. This school was founded in 1804 by the direct ancestor of Col. William Bingham, A. M., in 1870 the principal. It was a military school, attended by 61 students. It was one of the leading classical seminaries of both the Carolinas, and probably not excelled in thoroughness of instruction by any school of its character in the South Atlantic States. To-day, as reestablished

in Asheville, in the mountain region, it has acquired a national reputation. The school first established at Wilmington by Miss Amy Bradley, after graduating from distinguished services as a nurse in the Union armies in 1867, was well known. It was first an attempt to establish a school for the most destitute class of white children. In process of time Miss Bradley was appointed public school commissioner of the city of Wilmington, and subsequently, by the philanthropy of Mrs. Mary Hemenway, of Boston, she was enabled to found one of the best schools in one of the best-appointed buildings in the State, \$5,000 a year being appropriated by Mrs. Hemenway for its support. In 1870 there were 447 pupils receiving instruction in these schools. Doctor Sears, general agent of the Peabody education fund, had furnished \$3,000 for these various enterprises. The value of taxable property of the State in 1870 was \$123,361,591. At an assessment at one-twelfth of 1 per cent for education, \$102,801 was due, only \$63,000 of which had been paid into the treasury.

Superintendent Ashley was superseded in 1872 by Mr. Alexander McIver. The school law of 1868-69, under which the first superintendent had operated, was thrown into court and by a final decision was practically annulled. In 1871, on the meeting of the general assembly, Superintendent McIver appeared, with no power to act. After several efforts he was required to prepare a plan of public instruction, which was adopted, and under which for five years an attempt was made to conduct a system of public instruction in the State. It was, however, not a proper common school system, according to the American idea, but, as described by the superintendent, "was intended to combine public assistance with private enterprise; to secure the cooperation of that class of the people who are willing and able to do something for the education of their own children. Instead of having two systems of schools, the one private and supported entirely by subscription, and the other public, supported entirely by taxation, it was intended to unite the two systems to the advantage of both parties. It was intended that the public schools should take the place of private schools; that all the primary and grammar schools in the State should become public schools." The superintendent instructed the school officials of the State that "when the salary of the teacher of a free public school is to be paid partly by subscription and partly from the public school fund, the contract should be signed first by the patrons of the school and then by the school committee." It was provided by the school law that 75 per cent of the entire State and county poll taxes should be applied to educational purposes. The school funds of the year 1872 included all unexpended balances of apportionment previously made, 75 per cent of the entire State and county poll taxes of 1871 and of 1872, 6½ cents on the \$100 worth of all property and credits in the State, and 20 cents on the poll. The school fund was not to be apportioned among the several townships, but paid to the teachers of free schools without regard to locality in the order in which they might be presented. It was the opinion of the superintendent that funds sufficient to support schools four months in nearly all the counties of the State could be supplied in this way. "If the people of any neighborhood desire to avail themselves of the public school money they must make up by subscription an additional sum sufficient to satisfy the teacher whom they employ. The school must be free to all pupils. If any neighborhood refuses to make up a school in this way it can have no claim to any part of the public school funds."

It is unnecessary to pursue the history of this abortive attempt to establish a school system on the basis proposed by Superintendent McIver. During this period he labors through elaborate reports, discussing every feature of a public school system, and only defending his own on the ground that it is the

"germ of what may hereafter be developed into something more important." In 1870 the population of the State was 1,071,361, of whom 391,650 were colored. Of the total it is estimated that 65,301 were attending school, of whom some 11,000 were of the colored race. Nearly one-third of the people of the State from 10 years upward (397,690) were unable to read and write. In 1872 the number reported in the public schools was 50,681, of whom 16,387 were colored, and 7,600 were reported in private schools. In 1873 the number attending had risen to 106,309 (40,428 colored), with an estimated daily average of 70,872 (26,958 colored). The total disbursement for education was \$191,075.97. There were some 2,300 public schools in the State and 2,690 teachers. Although the legal school term was four months, in many instances it was only two months in length, and the average length was probably about ten weeks. Beside the radical weakness of the entire system, it was burdened with another difficulty, namely, that the poll tax, which constituted an important part of the school fund, was not properly collected. The sheriffs who collected the funds in the counties did not make proper returns. There was no such official as a county superintendent of public schools. The county commissioners were required to exercise a general supervision and control, but the duties of these gentlemen were confined to their office in the court-house. They had neither time nor disposition to interest the people or visit the schools. The school committees in their respective townships received no compensation for performing important duties. "The essential element of the American school system, the right of local taxation, has never been incorporated into the school law of North Carolina." Thirty-three towns and cities and six teachers' institutes had received assistance from the Peabody education fund to the extent of \$12,550, and other assistance was promised.

A convention of the friends of education was held in April, 1873, presided over by Hon. William H. Battle. Papers were read by leading educators of the State. Among the resolutions passed was one to the effect "that the general educational interests of this State are deplorable and alarming in a high degree, and are such as to require the noblest and most self-sacrificing effort of every true son of North Carolina to relieve her from such serious embarrassment;" also that "the revival of the university at the earliest practicable moment is essential to education in North Carolina."

In 1874-75 there appears to have been an increase in the number of schools taught, 2,820 for white and 1,200 for colored children, making a total of 4,020. The estimated amount of money paid in 1874 was \$297,549.85; the number of children in school was 174,083; the total number of children in the State between the ages of 6 and 21 was estimated at 221,450; the average length of the school terms about ten weeks. These operations were conducted under the school act of 1872-73, by which an annual tax of 8½ cents on the hundred dollars' worth of all property and credits and a special tax of 25 cents on polls were levied, and these and 75 per cent of the entire State and county capitation taxes and all other school moneys were to be apportioned among the several school districts according to the number of children in each; the apportionment thus made to each district was to remain to the credit of that district for any year the school should not be taught. Under this system "the State does not go into the school districts and establish a school without any effort on the part of the people of the district. It rather aids the people to establish their own school. If the people of a district want a public school they should exert themselves to establish, maintain, and support it." There was no provision under the law for city schools.

In short, here was a sort of cloudland of public education in a State of more

than 1,000,000 people, one-third of whom were declared illiterate by the authorities of the State, virtually dependent on the people who might have the disposition to contribute to eke out the scanty appropriations of the State. It left the entire organization, supervision, and support practically in the hands of a few, with no certainty that it could last longer than it was the fashion in every neighborhood to "make up" a school. There was no responsibility of the school when established to anybody, no central supervision, indeed, no security that the masses of the people were receiving even the ten weeks' instruction, and no knowledge by the superintendent, practically, of what was going on through the vast regions of the State. Meanwhile the superintendent was favoring the legislature with an elaborate annual treatise on the general subject of education, out of which it requires a careful examination to pick the actual facts of what was going on under his administration. It all reads like the dream of a visionary schoolman confronted with the awful reality of a great State placed in an almost helpless situation of educational destitution.

The schools of Wilmington, Newbern, Washington, Beaufort, Plymouth, Charlotte, Raleigh, and twenty other towns and small cities of the State in 1871-72 were subsidized by the Peabody education fund to the extent some of \$1,000, others of \$300 and \$500. Teachers' institutes had been held for four weeks, according to the State law. The poorer localities and the colored people were also aided. The American Missionary Association had 17 teachers and 1,600 pupils in Wilmington alone. Other denominational missionary organizations in the North were contributing in a generous way to the support of the poorer white and the colored population.

Th radical defect of the system of public school education that had prevailed from 1868 until 1876 was its neglect to provide for local taxation.

An important bill had been introduced in the general assembly in 1871-72 "authorizing the people of every town or city of more than 2,000 inhabitants by vote of majority to levy a tax upon the corporation sufficient to supplement the school fund provided by law, so that a graded school might be maintained ten months every year." Although this bill did not become a law, it represented one of the most important movements in the State at this early period, and afterwards led to the reform that did much to redeem the general system of public education from its failure of thirty years.

The desolation and discomforts of country life were driving many of the more ambitious and enterprising families of the State at this time into the towns and cities, where the concentration of wealth and public spirit favored the effort to plant the common school on the true American foundation, graded from the lowest primary to the highest secondary department, free to all classes and both races. It was greatly for the advantage of these towns that such a system of graded schools should be established, for their gain in desirable population often more than compensated for the additional expense of a thorough school system. Of course, the country members of the legislature were in no mood to approve such a hegira to the towns, leaving the country districts deserted and with less means of sustaining church, school, and other public institutions. It was therefore left to each of these towns and cities to approach the legislature and often to fight its way to a special act authorizing it to do this good thing; but this was done with such persistence that ten years later a number of these cities and villages like Raleigh, Goldsboro, Charlotte, Winston, Wilmington, Salem, Greensboro, Fayetteville, and others had established this class of schools. These schools, in the ability of their superintendents, the enthusiasm of their teachers, and the activity of their pupils, were probably superior to any public seminaries at that time existing in the South. A remarkable group of young men, several of them graduates of the University

of Tennessee, in which Doctor Joynes, one of the most accomplished of college men interested in the public school system in the Southern States, was a professor, had by travel and study made themselves familiar with the most approved methods of graded common school organization, instruction, and discipline. Nearly every one of these gentlemen has since become the head of some important educational institution, college, normal school, or a State or city superintendent. In many of these towns there was still remaining a spacious pile of school buildings, in an ample inclosure, formerly the town or city academy. These buildings and grounds were often passed over to the public school, and saved the expense of preparing houses of sufficient size and importance to shelter the great numbers of children attending.

For several years the common schools of North Carolina were really carried on the shoulders of these town and city graded school systems, whose superintendents and leading teachers, men and women, became enthusiastic missionaries of the gospel of the new time. The slow movements of the political machine named the "State department," at the capital, which did so little to move the sluggish waters in the 90 great counties of the Commonwealth and lift the great mountain realm of western North Carolina from its educational destitution, went on in their own way, and not unfrequently some of the reactionary wealthy men of the towns would, by lobbying in the legislature and at times by legal injunction, attempt to block the wheels of progress in their own communities. But the good work went on. Unfortunately, sometimes the colored people were not included in these opportunities, although in the larger cities and progressive towns much was done in this way. But it had become a bad habit in some of these places to push the colored schools of the incorporated town outside the municipal limits, leaving them to the meager support of the State distribution. The Peabody fund in 1872-1874 assisted 33 towns and cities and 6 institutes to the extent of \$12,155, giving from \$300 to \$1,000 to each.

The State university was by the State superintendent declared "in articulo mortis, and we are called upon to do something now or never to save it from death. The university should be the head of the common school system."

In 1873-74 it was estimated that the expenditure for schools showed an increase. There were 2,820 schools for white and 1,200 for colored children—4,020, against 3,311. In 1873, the number of children in school was 174,000, against 146,000 the previous year. Superintendent McIver thought public sentiment was becoming more favorable. "There would be no complaint about taxes if the law would provide the right kind of schools." But still his "summary of educational statistics is only an approximate estimate, as the counties do not seem to trouble themselves to report." He presents the amount of \$496,405.23 as the entire sum of the public school fund raised by the several county treasurers in the State for the year ending June 30, 1874. Only \$297,595 of this was distributed, and \$198,810 left in the hands of the county treasurers at the end of the school year. The grand total of children and youth of school age is put down at 369,960, of whom 242,768 were white and 127,192 colored. What portion of the 174,000 reported as in school were in daily attendance we are not informed; 2,875 persons had been examined and approved as teachers during the year.* In most of the counties the school term was only two months, the average length being ten weeks.

At this juncture a meeting of the State teachers' association assembled in Raleigh in July, 1874. A committee of five was appointed to prepare an address to the general assembly, suggesting the improvements needed in the then existing system of public schools. The sixth amendment of the constitution of the State in 1873 provided that the University of North Carolina should be

put into the hands of a board of trustees elected by the general assembly, and 64 gentlemen were elected, who effected an organization, chose officers, and appointed a committee to obtain possession of the university. After the usual struggle in the courts this provision was maintained. It appears, by Table No. 6 in the report of the superintendent, that the number of children at any time in the public schools in 1874 in 73 counties was 99,000 white and 46,000 colored. The average daily attendance probably reduced this number by one-half.

The administration of Superintendent McIver terminated about this time. Whatever may have been his merits as a friend of education—and they were very decided—his great mistake in persuading the legislature to change the entire system of public schools from a public to a semiprivate character was a hindrance that did not cease to operate for years to come.

In 1877 Mr. John C. Scarborough assumed the office of State superintendent of public instruction, and reported to Governor Z. B. Vance that "the changes in the school law have met with general favor." His impression from communications received at his office from different sections of the State is "that there is a general awakening among our people on the subject of public schools, which will, as I think, finally furnish the means to make our system much more efficient than it is at this time." He says: "The old system, if system it could be called, has been in operation since 1872. The schools were poor beyond comparison. The school taxes were collected and spent and no adequate returns of benefit were made. The schoolhouses were in a state of decay and ruin. The incapacity of the public school teachers with few exceptions was proverbial. The system was a failure and a farce, and the people paid taxes unwillingly for its support."

Four years after his accession to his post of State superintendent, Mr. Scarborough declares (in 1881) that "the legislature of 1881 found this condition of affairs, and the people clamoring for better public schools or none." In 1880 there were 2,626 public school districts without houses. The habit of dividing and subdividing the township into little school districts to accommodate personal claimants was a mischievous policy and minimized the value of the schools. Many of the schoolhouses reported hitherto had not been worthy of the name and might be termed mere "shanties." The average value of 3,766 schoolhouses in 1880 was \$47.60. The superintendent says that "the constitutional limitations to taxation make the provision for a four months' public school impossible, and the expenses of the State and county governments absorb too much of what is received." As late as 1881 only twelve and one-half weeks had been secured, and that by paying white teachers \$24.11 and colored teachers \$19.93 per month, on an average. "It is manifestly impossible to provide schools for the education of all the children in the State when the number of dollars from all sources for educational purposes barely exceeds the number of children of school age."

In that year (1880) there were 145,294 voters in North Carolina who could not read, 58,218 white and 87,076 colored. The people 10 years of age and over who could not read were 367,890, being 38.3 per cent of the entire population over 10. According to a record based on the ability to write, 463,975 over 10 years of age were illiterate, 48.3 per cent of the entire population over 10. Of the total white population 10 years and over (608,806), there were 192,032 who could not write, 31.5 per cent, and 77.4 per cent of the colored. The census of 1880 showed a decrease of 7.4 in the percentage of colored illiteracy.

The seven years of the administration of Superintendent Scarborough closed by a strong effort made against this condition of apathy, reaction, and open hostility to the progress of the common school so plainly set forth in the educational reports addressed to the governor and legislature, although probably obtaining

very little circulation among the people of the State. During the administration of Superintendent Scarborough Governor Thomas J. Jarvis was a warm friend of education, and has so remained during the years past. But the difficulties of extended travel, especially among the more destitute counties of the State, were almost as great as in the days of Doctor Wiley. There was no provision for the payment of traveling expenses to the superintendent, and his yearly bills were presented to be voted upon by the legislature, while his salary seems not more than sufficient for his comfortable support. At the best, the promenade of a State official through the State, at his own expense, with no power to act in anything, only authorized to report progress on what the county commissioners and local school boards were permitted to do by their people, with no power of supervision lodged anywhere in the State, the educational field a wild wilderness of extreme democracy, each little district going on "after its own sweet will," was not encouraging.

The outcome of this until 1881, the date of a change in the school laws, was a gain from 1877, when the total expenditure for public education was \$289,213.32 for a total enrollment of 210,459 and an average attendance of 104,173 pupils, with 2,382 teachers, to \$509,736 for 233,071 pupils enrolled and 132,546 in average attendance, with 3,857 public schoolhouses, valued at \$367,671.68, presided over by 5,173 teachers. For the proof of advancement in the common school system during these years we must look chiefly at the two agencies almost entirely confined to a number of the larger towns of the State, and for which they were largely indebted to the group of young men and progressive educators at the head of affairs in these centers of population. The first of these was what are called, in the reports of the State superintendent, "normal schools." These were in reality, as far as concerned the white people, summer schools for teachers of four to six weeks each. By a law of 1877, entitled "An act to establish normal schools," the State board of education made an arrangement with the trustees of the State University at Chapel Hill for the conducting of a school of instruction for white teachers during six weeks of the summer vacation, with the use of the college buildings and the full service of its faculty. To some extent they received aid from Doctor Sears, of the Peabody fund, for the means of paying the expenses of the attending pupils; 235 pupils were enrolled, with a daily attendance of 157, from 42 counties. This school became an established institution of the university, and indeed at this time seems the most important service rendered by that venerable institution to the people of the State. Its numbers increased with every year, at times 500 teachers being present. The instruction was of a high character.

A State colored normal school at Fayetteville had also been established under the act of 1877. The State board had \$2,000 to offer and the Peabody fund furnished the balance. A proper school for eight months in the year was established under the principalship of Mr. Robert Harris. The three classes represented the three grades of certificates awarded to teachers. A large building had been secured, with board from \$5 to \$8 per month. In September, 1877, the school opened with 40 pupils, increasing to 58, of both sexes.

It was inevitable that this movement should expand and have a potent influence in awakening the people of the State to the need of better things. In 1883 a summer school was held at the university, with 405 students and a model school of 229. The attending teachers had taught 9,599 pupils during the year. The superintendent of the school was E. P. Moses, of Goldsboro, one of the most competent and enlightened of the superintendents of the graded schools. At Wilson another school had been held, with 303 teachers, under Superintendent Tomlinson, of that village; at Elizabeth City, one with an attendance of 168, only 20 of whom were public school teachers, was held four weeks. The school

at Fayetteville, colored, reports 105. Salisbury, colored, held a six months' school, with 49 pupils. The Franklinton school, colored, continued eight months, with 77 pupils and increasing interest. At Newbern 116 people were taught for five weeks, under excellent teachers from Washington and other localities. The Plymouth school, colored, continued for six months, with an enrollment of 55. In 1883, 2,129 white and 963 colored teachers had attended normal schools and institutes, 3,092 teachers in all, three-fifths of the entire body at work in the State.

The graduates of these schools naturally sought occupation in the more prosperous of the numerous academies with which the State swarmed at this period or were secured by the few graded schools of the large towns. But, of course, the majority did continue to teach in such places as offered, and thus became a potent force in the movement that lifted the State legislature for a year above its usual level in 1881 to the establishment of county superintendency and the recognition of county institutes. In 1881 42 teachers' institutes were held in 18 counties, with 683 white and 169 colored teachers, 852 in all.

Another movement, perhaps of more importance, was the growth of the graded school system in the larger villages and cities of the State. An increasing number of these towns appeared in the State every year coming up to the legislature with a demand for a charter for a graded school. This included a local tax imposed by the people to supplement the State distribution. There were two distinct obstacles to this movement. First, the numerous private and denominational academies of the State had between them monopolized all the secondary and most of the primary education of the better-off people. The public schools had already successfully appropriated the elementary department; and the graded school, as good, and often better, in the secondary studies than the private academies, threatened to supplant these institutions altogether. In fact, in almost all these communities the graded school was established in a building that had been for years associated with the academical activities of the place. Another obstacle appeared in the habit of legal injunctions against the charters given by the legislature for this purpose, which in several instances involved tedious legislation, although always in favor of the people. But the fact was soon demonstrated that a good graded school in a North Carolina village or county town was the most enlivening business venture possible. The trend of well-to-do people was already from the open country to these places, started often by manufacturing enterprises and the development of the railroads. These places offered every facility for the education of children at a reasonable rate, and the parents of families were drawn to the towns, where, with only the payment of a moderate school tax, not equal to the private tuition of one pupil, a whole houseful of children could receive free schooling of a superior sort. The graded school also enriched the educational life of the country districts, attracting their ablest people to frequent visitations, and, especially on Saturday, gathering the county teachers in meetings, besides the stirring up of the teachers to frequent associations for mutual improvement.

But despite all this there was a certain disadvantage in this development. The graded school, although public and a reenforcement to the State system, was separated from the open country by a vigorous superintendency and a local board, and often by the support of the most progressive and prosperous class of people. It was chartered by the legislature and did not always report to the State superintendent, so that his annual communication to the State board gave no indication of its existence. For the 5,000 district schools in the 90 counties of the State there was, up to 1881, practically no efficient supervision. Each of these little districts was getting on in its own way, generally without attention from the county school commissioners, or even its own local board, none of whom

were salaried officers, the interest of the district trustees often centering on the employment of their own friends or members of their own families as teachers. The examination of teachers in too many cases was only a form, and the brief term of two or three months left the children open to all the demoralizing influence of life outside of a good school. Indeed, the school funds did not keep pace with the growth of the State in population and productive industry.

The legislature in 1881 raised the school tax from 8½ to 12½ cents on the \$100 valuation of property, with an increase of the poll tax, and made provision for county supervision and teachers' institutes, to be conducted by the county superintendents and attended by the teachers. The studies to be taught in the schools were particularized, and a standard for examination of teachers was fixed for the guidance of the county superintendents. Additional provision was also made for summer normal schools for both races. The arrangement for superintendents of the counties took effect in June, 1881. The superintendent reports that these officers upon assuming their duties found the school system and the schools in very bad condition. There was a want of properly directed interest on the part of the people and of the district school committeemen, often ignorant of their proper duties. The people were seeking to bring school-houses next to every man's door. Hundreds of these little schools had opened with funds only sufficient for a term of four weeks. Confusion and division reigned supreme. Even the public schools were reduced in number and the attendance was anything but hopeful. The large number of schoolhouses which had been partially repaired were either in a dilapidated condition, needing repairs, or were continued without regard to either numbers or comfort. One hundred and twenty-three teachers' institutes were held in 58 counties during 1881-82, in which 2,260 white and 650 colored teachers were instructed in matter and methods. County associations had been formed in several counties and educational books read. The amount paid in 1882 for schoolhouses and furniture was more than four times the sum in 1880, \$74,712 against \$16,132. The county superintendents received \$18,732, and the total amount paid for education was \$509,736.

But the ensuing year witnessed a reaction in the legislature, which, at the session of 1883, in obedience to a violent agitation in the less-favored sections of the State, carefully nursed by the opponents of the system, so cut down the salaries and restricted the duties of the county superintendents as to drive out of office the men most competent and throw back the county schools upon their former condition. The unfortunate action of the legislature in 1883 cut the life and energy out of the system and greatly crippled the work by destroying the efficiency of the county superintendency.

The report of 1883-84 was the valedictory of Superintendent Scarborough. A portion of this document consists of a valuable table, containing an account of the States that had adopted county superintendency or its equivalent, prepared by Hon. John Eaton, United States Commissioner of Education. Twenty-nine States had adopted county superintendency, under different names of the official, and other States, as in New England, had a most effective system of supervision in their township management of public education. In 1883 an effort was made to survey and put on the market the extensive swamp lands in the eastern part of the State, with the hope of benefit to the State educational fund. The feature of race distinction, mentioned before in the organization of several of the graded schools, whereby the colored schools were left out of the management, had been challenged and was to be tested before the courts.

In 1884 Mr. Scarborough was followed in the occupation of the office of State superintendent of public instruction by Mr. S. M. Finger. Mr. Finger was a native of the Piedmont section of the State and a student at Bowdoin College,

in Maine, when the civil war broke out. He returned to his State and entered the Confederate service, in which he rose to the rank of major. An experience of several years as a teacher introduced him to this important post, well qualified for its complicated duties. His administration of eight years covered a very important period in the history of popular education in the State. In the concluding remarks in his report for 1891-92 he speaks of "intense application to work and years of responsibility, the weight of which I have continually felt, almost as a burden," and, it may be added, a burden that probably shortened his life, as he lived but a short time after his retirement from the office.

Among the difficulties enumerated by him on assuming his office were: (1) The schooling of two separate races before the old antipathies and prejudices awakened by the emancipation of the slaves by the military power and their subsequent elevation to full American citizenship had time to wear off—prejudices from which he seems himself to be as free as could reasonably be expected; (2) the impossibility of meeting public expectation of results with the money provided; (3) the circumstance that a great many people of intelligence and influence in the State had opposed any system of public schools, while many others had been willing to have only a sort of charity system; (4) the constant effort to keep improper books out of school; (5) the conflict between the extreme advocates of the new and those of the old methods of school keeping; (6) successful opposition to the necessary legislation.

Superintendent Finger issued, under date of February 20, 1886, his first report, which was a partial one, the biennial session of the legislature requiring a full report only once in two years. He is able to say that there was an increase of \$51,693.38 in the receipts from ordinary taxation for 1885, and a corresponding increase of about one week in the school term. Of the 530,127 children of school age 298,166 attended the public, and more than 20,000 the private schools, making about 320,000 in all. He laments the fact that so many of the poorer people do not send their children to school, and urges influential people by advice and assistance to encourage them to improve the opportunities offered. The teachers are improving under the influence of the normal schools, institutes, and teachers' associations. The State is sadly deficient in good schoolhouses, although the graded schools are an exception in this as in all respects. The one discouraging aspect is the lack of sufficient money. There is not enough to meet the constitutional requirement of a four months' school. A judgment of the supreme court had deprived the school fund of money raised by taxation in excess of a \$2 poll tax and 66⅔ mills on \$100. The average attendance for 1885 was 185,578, an increase of 12,583. The average length of the school term was twelve and one-half weeks; the average salary of teachers, \$25.75 white, \$23.30 colored. Fifty-four teachers' institutes had been held for white and 43 for colored teachers, attended by 2,040 white and 681 colored.

Another decision of the supreme court seems to have given a quietus to the bad habit of evading the constitutional question of equal rights in education by applying the tax on the property and polls of the people of one color exclusively to the education of children of that color. An act embodying this feature was declared unconstitutional by the supreme court of the State; also a law that permitted the white people to levy a special educational tax on their own race for graded schools, while that received from the negroes could alone be used for them, was decided in the same way. Several of the new graded schools of the State were affected by this decision. It finished the course of some, while others were kept alive by private subscription.

In the report of 1887-88 the superintendent returns to the general subject with additional facts and arguments. The reason why the schools "provide

but poor and unequal facilities and do not meet the requirements of the constitution" is that "in the amount of money we spend in proportion to population, and in length of school terms, we are far behind even most of our sister Southern States." By a table giving the latest statistics of public education in all the 38 States of the Union the superintendent brings out the important fact that in 1887, about twenty years after the rehabilitation of the school system in 1868, North Carolina expended less money for schools per capita of population than any of the States excepting South Carolina ("a State far less wealthy in natural resources, and more burdened by a considerable numerical excess of colored population"), only about half as much as Arkansas, and less than half as much as Virginia. If all the school funds in all the States were raised from a tax on property, the rate in North Carolina would be lower than in any of the 38 States, excepting Georgia, Arkansas, and South Carolina. The rate in such a case would be 39 cents on \$100 in Maryland, 31 in North Carolina, 30 in South Carolina, 42 in Tennessee, 46 in Virginia, 22 in Georgia, 30 in Alabama, 65 in Mississippi, 60 in Arkansas, 61 in West Virginia, 59 in Florida, and 62 in Missouri. In the whole country, States and Territories, with an estimated population of 57,929,609, there were spent in 1887 \$115,103,886; about \$2 for every man, woman, and child, while North Carolina spent the small sum of 79 cents per head on an entire population of 1,667,868. The superintendent faces the fact that "there is a very strong opposition to taxation for public schools, and no good can come from trying to disguise the fact. Very frequently we hear the statement that it is robbery to tax a man to educate another man's children."

In his report of 1889-90 Superintendent Finger comes up to the good fight for the children with the declaration, "In the beginning of this report I desire to say, with as much emphasis as possible, that our schools, except in a few of the cities, are not satisfactory to any class of our citizens. For one class there is too much taxation. But for the increasing number who believe in liberal education of all the people for all the people's benefit and for the safety of the State the schools are unsatisfactory, because of the small amount of money applied and the consequent shortness of annual terms and want of proper qualifications on the part of many teachers." The tables by which the assertions of the superintendent are supported are among the most reliable that had ever been offered to the educational public of North Carolina.

In his last report (1891-92) Superintendent Finger returns to the charge by stating that the length of school term provided for by the general tax is about thirteen weeks. No district outside the cities and towns has any special tax, and only 15 of these levy one for schools. A large part of the towns and all the country districts are solely dependent on the general school fund levied by the general assembly, which supplies the average term of thirteen weeks. The general assembly of 1890 increased the tax on property from $12\frac{1}{2}$ to 15 cents on the \$100, and on polls from $37\frac{1}{2}$ to 45 cents. But the real increase of income from this would be only \$60,000, which would give but one week additional school term. About $6\frac{1}{2}$ per cent of the white and 28 per cent of the colored polls were never collected. The colored people in 1892 paid school taxes on property and polls to the extent of \$99,081, and the whites \$575,204. The property of the colored people was assessed at about \$8,000,600, and their entire contribution to the State was \$125,000, about one-half the amount used in their schools.

But while the financial support of the country and township schools, where nine-tenths of the children received all their education, was inadequate, and the legislature seemed almost impervious to the persistent representations of the leading educators of the State for reform, there were other indications more favorable to an educational advance along the whole line. Especially was this

evident in the increasing interest in the summer assemblies, called normal schools, for the instruction of teachers of both races. The legislature, by withholding a portion of its annual supply from the State University, had shut up the summer school of instruction that inaugurated this campaign against incapacity in the schoolroom, greatly to the disappointment of its friends who desired to make this, the most valuable of all the foundations for the higher education in the State, a leader in the training of young men for this profession. But in 1885-86, in compliance with the request of Superintendent Finger, arrangements had been made by which nearly \$10,000 annually were expended in the support of a number of summer schools for white and some schools of longer session for the colored teachers. These schools were under the direction of the ablest superintendents of graded schools in the different cities and their leading women assistants, who gave their vacations to this service, in some instances without compensation. This was a positive advantage, as these gentlemen and ladies as a body were probably, at that date, the most accomplished group of graded school managers in any Southern State, fully prepared by study, long observation, and, best of all, experience and knowledge of home conditions to deal with the crowds of young and inexperienced men and women who thronged these halls during the debilitating heats of a southern summer. These men and women in North Carolina who were thus brought before the people in these summer days during the eight years of the administration of Superintendent Finger, with the assembled teachers who toiled in the trenches, represented the power that brought forth the remarkable awakening of the State to popular education at a later period. Four thousand dollars were also appropriated annually to the support of five normals for colored teachers. Two thousand of this sum was given to the school at Fayetteville, in session eight months of the year, the remaining \$2,000 being divided among several of these schools.

In 1891 the general assembly was brought up to the point of legislation in behalf of the teachers by the reestablishment of the North Carolina Normal and Industrial School for young women at Greensboro. The State Teachers' Association, in 1886, had opened a vigorous agitation on the subject of a normal college, and appointed a committee to memorialize the legislature. Every succeeding legislature received the same petition, the State superintendent directing the work. In 1889 the bill passed the senate, but was lost in the house. In 1891 Governor Fowle urged the reconsideration of the subject. The Farmers' Alliance and other organizations had joined in the petition. Dr. J. L. M. Curry appeared at the capitol in one of those educational thunderstorms, by which he combined an unanswerable statement of reasons with a torrent of noble eloquence, to revive the desponding spirits of the faithful, supplemented, as in other cases, by an offer of pecuniary aid from the Peabody education fund to support the action of the State. The type of institution finally decided upon was that set by the State of Mississippi, in its Normal and Industrial College for white girls, first established at Columbus, Miss., and which has been patterned in Georgia, Alabama, and the two Carolinas. It includes a comprehensive curriculum, elective, combining industrial training in domestic and wage-earning branches, with an academical, collegiate, and pedagogical course of study. The flourishing city of Greensboro, one of the new manufacturing centers of the State, and located almost in the educational center of the Commonwealth, offered \$30,000 in money, and a 10-acre site adjacent to the heart of the city was donated by two citizens of Raleigh. In 1892 the school had 200 pupils, under the able presidency of Dr. Charles D. McIver. It has since become one of the most valuable institutions of the sort in the South. In 1889-90 the legislature had made an important step forward in concentrating the work of the white normal schools under the direction of Profs. Edwin A. Alderman and

Charles D. McIver, who, with salaries of \$2,000 each, by election of the State board, held institutes of a week's duration in as many centers as possible. A grant from Dr. J. L. M. Curry, agent of the Peabody education fund, enabled the board also to employ in this service several of the best educators in North Carolina and other States.

Another vital agency in the reform of popular education that was in progress during this decade was the graded school movement in cities and villages. In 1890 twelve cities were supporting this class of so-called graded, but really city systems of schools, some with a high school department, for terms of eight to ten months, nine of them by levying a local tax. Under the arrangement for the concentration of normal school work, a valuable series of institutes was inaugurated during the months of June, July, and August, by which 135 meetings were held, attended by 5,775 teachers, a number larger than the entire corps of white public school teachers in the State. Under the regular arrangement there were also held 7 institutes for white teachers and 21 for colored, attended by 700 teachers. Among the valuable features of this summer work were the reports presented by Professors Alderman and McIver. They were both extended treatises on public educational affairs in addition to the details of their own work. Both emphasized the demand of the superintendent for more money, and without fear or favor exposed the defects of the then existing condition of affairs.

The higher education, as far as it depended on the fostering care of the State, was still neglected. The superintendent reports, in 1890, that the State University was greatly in need of the means to repair its old buildings and generally to put it in the condition of a college settlement of 1890 rather than 1820. After one hundred years the legislature had been moved to comply with the original demand of the constitution of North Carolina, by the establishment of the Industrial and Normal College for women in Greensboro. The general assembly, in 1887, had taken away \$7,500 of the usual income of the university, and with it the normal professorship and the summer school of teachers. In 1888 the State appropriation was \$20,000, which was nominally under the control of a board of eighty trustees elected by the general assembly, one-fourth going out each year. The governor was ex officio its president, and ten members constituted a quorum. An executive board of seven trustees, elected by the general board, practically managed the affairs of the university. The pleasant village of Chapel Hill, the seat of the university, was situated in Orange County, and was under a statute prohibiting the sale of spirituous liquors within 10 miles of the university. The session of the university extended from the last day in August to the first Thursday in June, with only a ten days' vacation at Christmas. The test for admission, on paper, was certainly ample to insure a class of well-prepared students. Among the three courses of study was a special course in pedagogics, under the direction of President Kemp P. Battle. A law department was connected with the university. Provision for student aid was made by two funds. The annual expense of an education was estimated at \$200 to \$300.

The Oxford Orphan Asylum received a State appropriation of \$10,000. It contained 250 orphan children from 5 to 12 years of age. Education in letters and industry was a permanent feature.

In 1885 the Waitega Club in Raleigh memorialized the State legislature in behalf of a school of industries, in connection with the State department of agriculture, under the direction of Professor Kerr and afterwards of Dr. Charles Dabney. Under this able management the department had become the most vital and best known of all the public educational agencies of the State. A bill embodying the views of the petitioners became a law in March, 1885. It

provided that the county which made the best offer of material aid should have the school, and have joined with it the department of agriculture, the latter giving \$5,000 toward its maintenance. A great throng of farmers from 40 counties in 1887 proposed a change of the school to a proper college of agriculture and the mechanic arts, supported by the Congressional land grant of 1862, and in the same year the plan was recast to conform to this arrangement. The board of trustees was appointed by the governor and senate, with the governor as president ex officio. A subsidy of \$21,000, with a yearly appropriation of \$20,000 in addition to the income from the land grant was provided for its support, and the institution was established on an estate of 60 acres 1 mile from Raleigh.

Superintendent Finger during the last four years of his administration had made earnest efforts to obtain correct returns from the private schools of the State, and 650 returns from such organizations appear in his report. In his estimate these institutions, on the whole, were doing a good work. Their teachers seem to have been moved by the stir among the public schools, attended institutes, and carried the improved methods of study and teaching into their own work.

There had been a constant "tinkering" with the school laws, the most sensitive department of legislation, since the rehabilitation of the school system in 1867-68. By gradual additions the code had reached the status in which it was left in 1892 when Superintendent Finger retired from office. The school laws had been printed as an appendix to the superintendent's reports of 1889-90 and 1891-92, with such explanation as made them easy of comprehension to the average member of the legislature. Among the provisions they contain, the following indicate the progress made: (1) The provision that the school money shall be apportioned to the counties on the basis of the school population. (2) The State board of education shall recommend a series of text-books to be used for a term of three years, the prices to be fixed by the board, and no political or sectarian works to be included. (3) A provision for the accommodation of the State superintendent in an office in the statehouse; that he shall be director of the system of public schools and correspond with other States for the benefit of public education, and shall supply the educational wants of the State by counseling with the county school officials, by lectures before teachers' institutes, and by public addresses. (4) The justices of the peace and county commissioners of each county shall elect a county school board of education of three persons. The county superintendent shall be secretary and the county treasurer also treasurer of the board. Their compensation shall not exceed \$2 per day each and mileage. This board shall be charged with the general management of the schools, obey the instructions of the State superintendent, and accept his construction of the school laws. The county superintendent shall be elected for the term of two years by the county board of education, county commissioners, and justices of the peace in joint session. The county board shall lay off the county into school districts, apportion the school funds, two-thirds in proportion to the school population and one-third with regard to the equality of school term between the two races. (5) The county boards shall elect district school committees of three for each district. A provision is made that any committeeman who can not write shall make his mark. The county superintendent shall examine all teachers for certificates of appropriate grade, the test being 70, 80, and 90 per cent of correct answers by the applicant, to entitle him to a first, second, or third grade certificate, as the case may be. (6) The county superintendent shall have charge of the teachers' institute, the teachers being obliged to attend; and not exceeding \$100 of the county funds may annually be appropriated for its support. The district school committees

are authorized to employ and dismiss teachers and fix their salaries. (7) Twelve and one-half cents on every \$100 of property and 37½ cents on polls shall be levied for the support of schools, in addition to the State and county capitation taxes appropriated by the constitution and other revenues. These rates were changed in 1892 to 15 cents and 45 cents, respectively. In addition the county commissioners shall levy a tax for the support of graded schools under certain conditions, namely, that one-third of the freeholders of any city or town apply to the commissioners of the county asking for such tax, and the qualified voters of the place order it, but not to exceed one-tenth of 1 per cent on the value of property and 30 cents on polls. (8) All teachers or superintendents of schools supported by public funds shall report to the State superintendent. (9) In 1889, among other laws, one was passed abolishing "partial third-grade" certificates. (10) An important first step was taken toward the system of district supervision of schools, recommended by Superintendent Finger, and now adopted in the State of Massachusetts, by the union of two or more contiguous districts by a majority vote of the local committees and the employment of a practical teacher as superintendent of the public schools in the united district. (11) The white normal schools should be abolished, and the \$4,000 previously applied for their support be employed to hold institutes, which the teachers were required to attend, and conduct examinations of teachers. These were not to supplant but to supplement the institutes held in the 90 counties by county superintendents. (12) A long provision is made for instruction in the nature of alcoholic drinks and narcotics in the public schools.

Here, after a struggle of twenty-five years, the State found itself with a code of State legislation under which any wide-awake county could establish and support a complete system of free public education for both races. The entire enrollment for 1892 was 335,358 and the average attendance 198,747 out of a school population of 598,256. There were some 35,000 children and youth in private schools. The average salaries of teachers continued low, \$26.20 for white males and \$22.72 for white females, and \$23.33 and \$20.14 for colored teachers. The value of public school property was \$892,364, and the number of public schoolhouses 6,160.

During the four years from 1893 to 1897 the public school system was again placed under the superintendence of Hon. John C. Scarborough, whose previous administration from 1877 to 1885 has already been described. According to his report (1895-96) the condition of education on his first assuming office had been "deplorable," and he found himself "helpless in any effort to organize a system and develop the educational spirit of the people." The new school law passed by the legislature of 1879 "by some accident was found without the signature of the two speakers [of the general assembly], and the supreme court declared it inoperative." In 1881 Superintendent Scarborough drew a bill which in its main features became a law. This increased the State school tax to 12½ cents on the \$100, and provided for county superintendents and teachers' institutes, but failed to provide for county boards of education. In 1885 he succeeded in obtaining separate school boards of education. Under the vigorous administration of Superintendent Finger the striking advance already noticed was made. Under these conditions Superintendent Scarborough was able to report a fair degree of progress during the fifteen years from 1877 to 1892. He opens his second campaign of education by vigorous demands for "advance along the whole line." (1) He recommends an additional State levy for the support of common schools, as the constitution of the State commands that "one or more public schools in each school district shall be maintained at least four months in every year." The sum of \$777,079, available from all sources, only provided for a school session in 1893-94 of less than thirteen weeks, six-

teen days short. An additional amount of \$200,000 was needed to carry the schools to eighty days, at the average rate of paying teachers then current, less than \$25 per month. (2) A recommendation even more vital to a public school system was for the passage of a law making it easier to hold school elections in each township, city, or district on the subject of local taxation for public schools, and that the maximum of one-tenth of 1 per cent at least be doubled. The superintendent well remarks, "the greatest defect in our school system, as at present constituted, lies just here." (3) A suggestion was made for a State appropriation for teachers' institutes. The annual appropriation of \$4,000 begun in 1891 had been diverted to the support of the white woman's normal and industrial college at Greensboro. The agent of the Peabody educational fund had withdrawn his distribution for this purpose on the ground that the State no longer contributed to the support of the teachers' institutes.

But the superintendent did not find the legislature in a mood for response to any of his suggestions. The demand for additional taxation, State and local, fell upon ears attuned to the plea of economy. Not only was this urgent demand and the plea for teachers' institutes neglected, but in 1895 the legislature proceeded to knock out of place the most essential wheel in the entire educational machinery, by the abolition of the county boards of education and the county superintendency. In 1895-96 the retiring Superintendent Scarborough declares that "very little has been saved, in the matter of expense, by the abolition of the county boards of education, the county superintendents, and the teachers' institutes. On the other hand, the school interest has languished, the teachers have failed to make progress, the school districts, left to themselves, have multiplied neighborhood disputes, communities have been hopelessly divided, and confusion reigns in many places for the want of a wise executive officer to settle matters and to urge forward educational sentiment and work, and to put teachers on lines of study and improvement for their responsible work." At the same time the legislature reacted on the most hopeful of all the State educational institutions, the State Woman's Normal and Industrial School, disregarding a report of their own committee upon examination, which requested an annual gift of \$11,250 for two years for necessary improvements, and substituting therefor \$5,000 per year.

Meanwhile the general fund had risen from \$751,608.11 in 1893 to \$824,238.08 in 1896. The school population had risen from 618,541 in 1893 to 634,185 in 1896. The entire enrollment in 1894 was 359,385 (235,486 white, 123,899 colored); in 1896 it was 348,610. The average attendance was 220,294 in 1894 and 204,203 in 1896. The percentage of average attendance on the enrollment in 1896 was 62.5 white and 59.6 colored. The average length of the school term in 1894 was 12.85 weeks for white and 12.12 for colored; in 1896, 12.42 white and 11.75 colored. The average salary of the teachers of both races had fallen from 1886, being \$24.75 per month for white males and \$21.64 for white females. The value of school property had fallen from \$1,118,297.88 in 1894 to \$888,132.35. The number of public schools was 142 more in 1896.

But during these four years an important point had been made. A school like the Woman's Normal and Industrial Seminary at once took a front place among the numerous female seminaries of the State, and one of its numerous advantages was the stimulus imparted to the entire system of schooling for girls. Another very important feature was the distribution of its constituency. Large numbers of its pupils were graduates of other schools, all over 16 years of age, and the average age 19 and 20; 88 of the 96 counties in the State were represented in the first two years. During the second year (1893-94) 391 students were enrolled, of whom 127 defrayed their own expenses. The parents of 153 were farmers, and those of only 30 were of the four liberal professions;

317 had been wholly or chiefly educated in the public schools, and 246 would not have attended any other woman's college in the State. Several of the young women were supported by their fellow-students and the two literary societies. Board in the college dormitory was furnished at a fraction less than \$8 per month. During the first two years the school received \$8,000 from the Peabody fund, whose agent, Dr. J. L. M. Curry, had been highly influential in persuading the legislature to its establishment. The report of the school for 1895-96 was even more favorable, although the State had given it at the start, in 1891, only half the support it bestowed on other institutions, with no provision for a site and none for buildings, and had only slightly increased its appropriation in 1893 and 1895. The people indorsed the new movement by sending 445 of their daughters, crowding the building and compelling the purchase of 112 acres of additional ground for a park and school of horticulture. The department of pedagogics and the school of practice and whatever related to the education of teachers were under the direction of Professor Claxton.

During the four years of the administration of Superintendent Scarborough the Peabody educational fund, through its agent, Doctor Curry, contributed \$100 per annum for two years for the education of each of 20 students in the Peabody Normal College at Nashville. These young men and women were appointed by the superintendent, after a competitive examination. Although the State in 1891 had diverted the \$4,500 annually appropriated for teachers' institutes to the industrial and normal school at Greensboro, and the Peabody fund had constantly refused further aid, several institutes were held for both races under the direction of President McIver and his faculty, and other contributions to the colored normal school were received. The legislature also inaugurated a valuable new departure in subsidizing several graded schools which had established a department for the training of teachers; and one of them, Cullowhee High School, at Painter, in the remote western portion of the State, in Jackson County, became a valuable agency of general education. The State extended aid to the extent of \$1,500 annually to six normal schools for the colored race. The Slater Colored Normal School at Winston was established in 1895 with an annual support of \$1,000, under the vigorous principalship of Mr. S. G. Atkins. This school, also aided by the Slater fund, is regarded an important addition to the work of training teachers for the public schools of the State. The graded school of Goldsboro, one of the oldest in the State, was subsidized as a training school for white teachers. By a liberal contribution from the Peabody fund several institutes for teachers were kept in operation during the years of the administration of Superintendent Scarborough.

A radical change in the political affairs of the State of North Carolina brought to the office of State superintendent of education in 1896 Mr. Charles H. Mebane and sent up to the statehouse a legislature whose attitude to the educational affairs of the Commonwealth was in almost startling contrast with the spiritless and reactionary feeling of the few years preceding. The legislature thus brought to the statehouse was, without exception, the most remarkable for its liberality of any in the educational history of the Commonwealth. Its only rival was the one which elected Doctor Wiley, first State superintendent of common schools, a generation earlier, in 1852. The record of their work is as follows: (1) The State board of education was required to appoint a State board of school examiners, consisting of three professional teachers, together with the State superintendent, who was ex officio chairman. This board was required to prepare and recommend, through the county supervisors, a course of reading and professional study and such outlines of methods of instruction and discipline as would be helpful to the teachers of the State; it was also authorized to grant life certificates to teachers on examination. The

board was to meet at the call of the State superintendent. Its members received no compensation save board and traveling expenses when on duty. (2) The county commissioners, together with the clerk of the superior court and the register of deeds of each county, once in three years were required to elect a county board of education consisting of three men of adequate intelligence who favored public education. This board, with the clerk of the superior court and the register of deeds, was directed to elect a county supervisor of schools once in two years—a practical schoolman of liberal education—who, under the direction of the county board, was to perform the duties usually assigned to a county superintendent. (3) The county board was directed to divide each county into as many school districts as there were townships in the county and elect a school committee of five men from each district, only three to be of the same political party. The schools of each district should not contain an average of less than 65 pupils. The county school board, with the supervisor, should apportion the school fund to the districts per capita. (4) The county supervisor should examine teachers; the third-grade certificate was abolished and only the second retained. He was to inform himself of educational affairs at home and abroad, visit schools by direction of the county board, and suspend incompetent or immoral teachers, with the concurrence of the district school committee. (5) County institutes were to be held for teachers, lasting a week for each race. The State superintendent was required to report to the county board any defect of the county superintendents. (6) The general assembly of 1897 made the annual appropriation to the normal and industrial college for white girls \$25,000. An additional appropriation of \$5,000 was made for a new water supply and repairs to the State university. Several graded schools were chartered during the session of 1897. The normal graduates of the Asheville Normal and Collegiate Institute for white girls were permitted to teach in common schools without examination. Twenty thousand dollars for two years was appropriated for a school building at the institution for the deaf and dumb and \$11,000 for the support of a similar institution for the colored race. The normal and industrial college for colored teachers received an annual subsidy of \$5,000. The North Carolina College of Agriculture and Mechanic Arts, at Raleigh, for white pupils was separated from its relation to the department of agriculture and placed under the direction of a board of 15 trustees appointed by the governor with the consent of the senate. (7) The State school tax was raised from 18 to 20 cents on \$100, thus securing an addition of \$50,000 to the State school fund. (8) The county commissioners were required to cause an election to be held in every township district, at which the question of a local tax of at least 10 cents on each \$100 and 30 cents on each poll should be decided, to be obligatory for three years, and then only to be reduced at an election called for by one-third the voters and by a majority vote. If any township failed to adopt the tax, the election should be repeated every two years until a majority was secured. On the adoption of this tax the State should contribute a sum equal to the tax raised as long as the \$50,000 assigned for this purpose should last. Eleven townships voted a special tax under this law in 1897. (9) Four thousand dollars, in addition to the regular sum appropriated, was voted to the seven normal schools for the colored youth. Five thousand dollars for two years was given to the State agricultural and mechanical college for colored students.

Here, certainly, was an advance along the whole line, which indicated a decided revolt against the spirit of reaction which had prevailed since the close of the administration of Superintendent Finger. The new superintendent in his first report, covering the years of 1896 to 1898, appears in hearty and even

enthusiastic sympathy with the temper of the legislature. This remarkable document reminds one of the eloquent and inspiring reports of Superintendent Wiley in the first years of the common school, before the civil war. His counsels to the county supervisors, boards of education, teachers' institutes, and the general public are full of positive and practical suggestions. His attitude before the legislature is not only independent, but almost imperious, and his first recommendations cut deep into the old abuses and proposed radical changes in the local administration of educational affairs. He is especially positive in his denunciation of the mischievous mixing of partisan politics in educational affairs, which had been the habit during the previous years and which largely accounts for the arrested development of the cause of universal education in the State.

The superintendent devotes a large portion of his recommendations to the subject of text-books. He publishes a valuable table of the practice of all the States in respect to the supply of text-books, and suggests that the State board of examiners should adopt a list, and that the maximum price should not exceed 75 per cent of the published wholesale rate. He presents with great cogency the fact that local taxation is the soul of the public school system. The great neglect of school attendance and the abuse of child labor is an argument for some "mild form of compulsory attendance." Under the title "Thoughts by the way," the superintendent informs the legislature that he began work on January 13, 1897, and that his entire time and "whole interest of mind, heart, and soul had been thrown into the work." He has tried to show the people that the office is not a sinecure, where the duties of the superintendent are merely to "furnish some blanks for records and the preparation of some few statistics." He was bound to "remove the office and its duties as far as possible from partisan politics;" and in contrast to some of his predecessors, he had taken no active part in any political campaign. He has also "endeavored to cultivate a closer sympathy and common interest between the public and private and denominational schools and colleges, believing that good public schools will mean well-filled academies and colleges." He returns with emphasis to the idea of increasing the power of the supervisors, and more than intimates that the county boards are a restraint on the functions of the county supervisor in that, for the sake of a narrow economy, they practically nullify his chief function—the constant supervision and visitation of the schools.

Seldom has the legislature of North Carolina been addressed in a manner so direct, straightforward, and effective, and, with a few exceptions, so wise and practical as in this remarkable report of Superintendent Mebane. And even more valuable for a permanent influence on his constituency was his editing of the material which fills up the remaining 900 of his bulky volume of nearly 1,000 pages. Most original and entertaining of all is the essay of ex-President Dr. Kemp P. Battle, of the State university, on the extinct private and denominational schools of the State. Here the author goes over ground hitherto almost untrodden, and, in his deeply interesting record of the various attempts to realize a given ideal of the secondary and higher education at an early colonial and subsequent period, explains the fact that while in the matter of illiteracy North Carolina has always remained among the lowest of the States in the Union, still there was always an educated public which endeavored to supply the lack of educational opportunity by the founding of a series of academies and embryo colleges, from which came forth successive generations of men and women whose reputation has been among the foremost in the country. Among the younger men none has done more excellent work than Dr. Stephen B. Weeks, late of the United States Bureau of Education, in

his History of Public Schools in North Carolina. Superintendent Mebane did great service to the cause of education in his State by quoting 70 pages of this work in his report. A sketch of the history of education in North Carolina, by Dr. C. H. Wiley, compiled while superintendent of education in 1855, also a sketch from the History of Education in North Carolina, by Mr. Charles Lee Smith, are given in the report. This portion of the report is further enriched by an historical sketch of the office of superintendent of public instruction, by the superintendent. No such collection of entertaining and important material for the appreciation of the past and encouragement for the present condition of educational affairs had ever been placed before the legislature of the Commonwealth.

In addition to this, the superintendent published in the same bulky volume the proceedings of the meeting of county supervisors of public schools in Raleigh, December 30, 1897, with several of the more important addresses delivered, besides his own address at the teachers' association, and other institute papers. Even more suggestive are the numerous comments from 26 of the county superintendents, expressions of interest in the public school system by the presidents of the 10 leading colleges of the Commonwealth, and especially the reports of the State institutions; and valuable, as always, is the report of the new industrial and normal college for white girls, by President Charles D. McIver. Every feature of the State interest in education is here brought into the light.

The report of the board of examiners, evidently prepared by the superintendent, is in itself an excellent treatise on the training of teachers, and could be consulted with good effect beyond the limits of the old North State. The reports of the schools for the colored race—those supported by the State and others with headquarters in Northern boards—are excellent reading. The examination for first-grade life certificates, the explanation of the school legislation of 1897, the lists of county superintendents and boards of education, and the record of institute work of the counties are also included in this most valuable document.

Another extremely valuable feature of the report is the account of the leading denominational colleges and private high and academical schools of the Commonwealth. No Southern State has made a better record than North Carolina in several of these seminaries. The school for girls established by the Moravian Brotherhood at Salem in 1802 was one of the first institutions of its kind in the South and one of the first in the Union, and has sent forth a roll of distinguished women. Others are fully described, like St. Mary's College at Belmont and Peace Institute at Raleigh, the later established college for girls at Asheville, the system of schools established by the Friends in and near the city of Greensboro, and the Bingham School, founded near Wilmington in 1793 by Rev. William Bingham, who came from Ireland in 1785 and left the work to his son and grandsons, under whose administration it has outgrown several removals and now occupies one of the most sightly hills overlooking the mountain city of Asheville. There are at present not less than 100 of these private high and denominational schools in the State.

When we turn from this exposition of education in its application to the mass of the people to the actual results of the new legislation and the outburst of zeal and labor now put forth, we are not so fully encouraged by the figures in the tables of statistics. The total receipts of State funds in 1897 were \$830,500.18, and in 1898, \$986,514.85, the last including an additional appropriation of \$100,000 by the legislature and both exceeding the receipts of 1894, 1895, and 1896. Meanwhile an increase of children and youth of school age for 1897 and 1898 does not appear, the figures of 1896 being some 6,000 in excess of 1898. The public-school enrollment for 1897 was only 5,000 more than in 1896, although it reached nearly 400,000 in 1898, the actual figures being 399,375. The average attendance in 1898 was about 213,000, several thousand less than in

1892 and 1893 and little more than half of the enrollment. The average length of the school term in 1898 was 14.06 weeks for the white and 12.79 for the colored race, a gain of about two weeks for each over the previous year. The average salary of teachers was less for white teachers than in most of the ten years from 1886 to 1896, viz, \$24.66 for males and \$22.96 for females, with a similar showing for the colored schools. In 1898 the total value of school property was \$930,214, being less than in 1893, 1894, 1895, but \$50,000 more than in 1897. In 63 townships and districts \$8,596.63 had been raised by special donation, in sums of from \$12 to \$500, which were duplicated by the State, causing an addition of \$17,193.26 to their resources, but only 12 townships had voted to tax themselves to the amount of \$2,260.07, in small sums of from \$50 to \$483.

In short, in the moderate response of the people to their legislature and the eloquent and zealous superintendent of public instruction, we discern the same characteristic as that suggested by President McIver in his earnest plea for more aid to the most vital and original of all the State educational institutions—the industrial and normal college for white girls. He says: "North Carolina does not, as a rule, take to new things with great enthusiasm, and it is characteristic of her caution and conservatism that she should have established this institution [a century after her first experience as a Commonwealth] by giving it a small appropriation for support—about half what it gave to other institutions—no appropriation for a site, and almost no appropriation for buildings. But," he adds, "it is also characteristic of our sturdy, sensible, old State that, as her faith in the usefulness of the institution has grown, she has gradually increased her investment in its development." The cheerful confidence of all its leading educators in the slow but sure characteristic of this great Commonwealth is justified by the fact, especially by what is shown in the record of the two years 1897 and 1898.

The second biennial report of Superintendent Mebane for the years 1898–99 and 1899–1900, proceeds along the same line of urgent demand for reform. The superintendent declares that the standard of requirement for teachers is exceedingly low in some counties, and he calls for uniformity of requirement. He advises that the county boards of school directors be required to publish annually an itemized statement of the receipts and disbursements of the school fund, and that they should be required to keep posted in every public school-house a list of the text-books adopted to be used in the schools. Each county superintendent should be ex officio the treasurer of the public school fund of his county. He protests against the loose management of the school funds for the past twenty years, and calls for more thorough qualifications for the office of county superintendent. He declares that "the public schools have been in the galling grasp of the court-house politicians for twenty years in some of the counties." He recommends that the county superintendent be elected by the teachers and educators of the county. The average compensation of this official is \$128, and he is responsible for the expenditure of more than \$56,000. "The present school law is too much burdened with machinery. We have too many officers—too many that have 'a little brief authority.'" Every school committeeman or trustee "should be in favor of public education and public taxes for schools." The annual school should not be divided into two terms. The State board of examiners had prepared a course of study for the colored normal schools. A great part of the work done in these normals should have been done in the graded schools of the colored people in the towns where normals are located. Much of the work is not thorough and not practical. "The normals are normal only in name." They should be consolidated. He earnestly pleads for the enactment of a rigorous law for uniform text-books, and publishes a table with extensive information of the action of different States in

this respect. On the subject of finances he says: "We must have more money before we can ever hope to educate the great mass of our people." Four hundred thousand dollars more can be secured for the public schools by the enforcement of a law passed in 1897 for the taxation of railroad and other companies. One way to increase the public school fund, he recalls to mind, is by local taxation. The superintendent publishes lists of States having and not having compulsory-attendance laws, and shows the per cent of illiteracy of the population 10 years of age and over in each, according to the census of 1890. The State of North Carolina had 36 per cent, including 23 per cent of white illiteracy, a greater percentage of white illiteracy than in any other State or Territory except New Mexico. "The people of the State have never yet realized the importance of supervision in public school work." In retrospect of his four years of official life, he declares: "The longer I was in the work the more I was impressed with its greatness and its consequences for the uplifting of the great mass of the people." The difficulties he had had to overcome in the beginning were new sets of officials in 1897 and radical changes in the school laws. A new legislature made radical changes again, and a decision of the supreme court caused confusion in several counties. In 1897 he invited the leading educators of the State to a consultation. The press was generally favorable to the new impulse of reform. Even the politicians had observed which way the wind was blowing. "We have reached the period in North Carolina history when the politician is a great friend of public education. He speaks long and loud for the dear children." "Since January, 1897, more money has been given to colleges and more spent for school buildings and equipments than ever before during so short a period," namely, \$1,000,000. A table of the different colleges, high schools, and academies of the State that have been benefited in this way is given. An appropriation of \$100,000 to the public schools in 1899 gave hope of encouragement. More graded schools had been established during the four years of Superintendent Mebane's term than in any similar period of the State's history. The superintendent recommends the legislature to make an appropriation to erect a monument to the memory of Calvin H. Wiley, the superintendent of public schools previous to 1860.

The office of State superintendent in 1901 was filled by Gen. Thomas Fentress Toon. Superintendent Toon only lived for thirteen months after his election, and his place was supplied by Mr. J. Y. Joyner, who in December, 1902, made the report for this biennial period.

Superintendent Joyner takes up the good work of educational reform under the administration of Governor Charles B. Aycock with great vigor, and in his elaborate report enforces all the advanced ideas of the previous administration. He, however, calls the attention of the people to the actual condition in which the schools are still found, notwithstanding the decided advance of the preceding four years. In 1902 there were 676,615 children of school age in the State—454,657 white and 221,958 colored. For the education of these children the State was spending \$1,287,275.70, exclusive of \$161,363 raised by local taxation. There were 314,871 white and 149,279 colored children enrolled, and an average of 185,598 white and 80,972 colored children in daily attendance. The total annual amount expended for each child of school age in North Carolina, including local taxes, was \$2.17, the average amount in the United States being \$9.50. North Carolina expended for each child enrolled \$3.17 to \$20.29 in the United States. The average monthly salary of teachers was \$26.78 per month for white and \$22.19 for colored teachers, and in the United States the average monthly salary was \$48. The length of the public school term in North Carolina was 76.15 days; the average length in the United States, 145. The super-

intendent gives the statistics of illiteracy, saying that "the per cent of white illiteracy in North Carolina is more than three times as great as the average for the United States." The average value of the schoolhouses in the State was, for white \$231.43, colored \$136; 830 districts were without schoolhouses; 829 had log houses. In different counties of the State schools were closed during the winter on account of the buildings not being habitable in cold weather. A woman's association for the betterment of public schoolhouses was organized. During the year 1902, 332 new schoolhouses were erected. The superintendent suggests that the funds arising from the sale of lands belonging to the State board of education, amounting to \$194,159.18, be used for schoolhouses.

A great hindrance to effective education in a State so large and sparsely populated is the multiplication of district schools to satisfy special families. Nearly one-half the white school districts of the State, and 44 per cent of the colored districts, contain less than 65 children of school age. The process of consolidating school districts has been well begun, 318 having been consolidated since June 30, 1901, and several counties having made commendable efforts in this direction. The average annual salary of white public-school teachers is about \$100, "less than is received for the most menial service in almost any other business." The superintendent had addressed letters to the different leading institutions of learning in the State, suggesting normal departments in each. He reads a vigorous lecture on the subject of school supervision. The average salary of a county superintendent is \$355. He urges the necessity of a competent man as county superintendent in every county in North Carolina. He also demands an increase in the supervisory power of the State board of education by the addition of five deputy State superintendents or State supervisors of education, to serve for two or four years, at a salary of \$1,250 a year, and expenses not to exceed \$500 a year. Since 1874 the general State and county tax for school purposes has been raised from 8½ cents to 18 cents on \$100. Three-fourths of all the State and county poll tax is devoted to public schools. The school fund has been increased from \$297,090.85 in 1875 to \$1,269,714.30 in 1902. He urges the great importance of local taxation. Since 1900 there has been an increase of 7.8 per cent in enrollment and 6.5 per cent in daily attendance in the white and 8.1 per cent in enrollment and 3.5 per cent in daily attendance in the colored schools. He urges the importance of laws for the protection of children in manufacturing communities. Several important educational meetings had been held during the year. Eighty-two per cent of the population of North Carolina is rural and agricultural. Among "signs of hope and evidences of progress" he notes the steady increase in taxes and appropriations for public schools; the increase in amount raised for schools by local taxation; a growth in sentiment and demand for consolidation; the increase in the number of schoolhouses built and improvement in their character; the increase in amount raised by private subscription for public schools; the increase in the attendance of the colleges and high schools of the State; the increase in the attendance of public schools; a reduction of white illiteracy during the decade ending in 1900 from 23.1 to 19.5 per cent, and of colored illiteracy from 60.1 to 47.6; an increased attendance at educational gatherings; strong declarations in platforms of political parties in favor of education, and, finally, the adoption of the constitutional amendment by an overwhelming majority, making intelligence an absolute qualification for suffrage after 1908 and recognizing it as one essential of citizenship.

SOUTH CAROLINA.

The very interesting history of the persistent attempts of the white people of South Carolina, led by a zealous educational public among the leading classes, to establish a system of common schools for themselves, is told in Chapter VII of the Report of the United States Commissioner of Education for 1899-1900. Several of these schemes were well devised, and only failed of effect by the radical weakness of the majority of the Southern attempts at the educating of the masses previous to the civil war. They all were constructed on the plan of "local option," and depended for their adoption on the disposition of the different counties of the State. A good deal of money, first and last, was distributed through South Carolina for this purpose, which was probably used to subsidize the different private and denominational schools for the training of a number of children of the poorer classes. The South Carolina College had among its professors and presidents men like Cooper, Lieber, Preston, and Thornwell, who made it a broader and probably more influential representative of the higher culture in its adaptation to all classes and conditions of the people than any of the Southern universities of the period, up to the breaking out of the civil war.

Previous to 1868 there was no provision in the constitution of South Carolina for universal education. The city of Charleston by special charter had established a creditable system of public schools for white pupils in 1860, largely taught by Northern instructors, under the leadership of Hon. C. G. Memminger. At the close of the war he returned to his native city and gave the remainder of his life to the reestablishment of its public schools. It was not until 1868 that, under the new régime of the State, South Carolina acknowledged its obligation to educate all the classes of its citizens. The constitutional provision governing the matter, the first of the kind that ever was made in the State, is as follows:

CONSTITUTION OF SOUTH CAROLINA, APRIL 14-16, 1868.

ARTICLE X.—*Education.*

SEC. 1. The supervision of public instruction shall be vested in a State superintendent of education, who shall be elected by the qualified electors of the State in such manner and at such time as the other State officers are elected; his powers, duties, term of office, and compensation shall be defined by the general assembly.

SEC. 2. There shall be elected biennially in each county, by the qualified electors thereof, one school commissioner, said commissioners to constitute a State board of education, of which the State superintendent shall, by virtue of his office, be chairman; the powers, duties, and compensation of the members of said board shall be determined by law.

SEC. 3. The general assembly shall, as soon as practicable after the adoption of this constitution, provide for a liberal and uniform system of free public schools throughout the State, and shall also make provision for the division of the State into suitable school districts. There shall be kept open at least six months each year one or more schools in each school district.

SEC. 4. It shall be the duty of the general assembly to provide for the compulsory attendance, at either public or private schools, of all children between the ages of 6 and 16 years, not physically or mentally disabled, for a term equivalent to twenty-four months at least: *Provided*, That no law to that effect shall be passed until a system of public schools has been thoroughly and completely organized and facilities afforded to all the inhabitants of the State for the free education of their children.

SEC. 5. The general assembly shall levy at each regular session, after the adoption of this constitution, an annual tax on all taxable property throughout the State for the support of public schools, which tax shall be collected at the same time and by the same agents as the general State levy, and shall be paid into the treasury of the State. There shall be assessed on all taxable polls in

the State an annual tax of one dollar on each poll, the proceeds of which tax shall be applied solely to educational purposes: *Provided*, That no person shall ever be deprived of the right of suffrage for the nonpayment of said tax. No other poll or capitation tax shall be levied in the State, nor shall the amount assessed on each poll exceed the limit given in this section. The school tax shall be distributed among the several school districts of the State in proportion to the respective number of pupils attending the public schools. No religious sect or sects shall have exclusive right to or control of any part of the school funds of the State, nor shall sectarian principles be taught in the public schools.

SEC. 6. Within five years after the first regular session of the general assembly, following the adoption of this constitution, it shall be the duty of the general assembly to provide for the establishment and support of a State normal school, which shall be open to all persons who may wish to become teachers.

SEC. 7. Educational institutions for the benefit of all the blind, deaf and dumb, and such other benevolent institutions as the public good may require, shall be established and supported by the State, subject to such regulations as may be prescribed by law.

SEC. 8. Provision shall be made by law, as soon as practicable, for the establishment and maintenance of a State reform school for juvenile offenders.

SEC. 9. The general assembly shall provide for the maintenance of the State University, and, as soon as practicable, provide for the establishment of an agricultural college, and shall appropriate the land given to this State for the support of such a college by the act of Congress, passed July second, one thousand eight hundred and sixty-two, or the money or scrip, as the case may be, arising from the sale of such lands, or any land which may hereafter be given or appropriated for such purpose, for the support and maintenance of such college, and may make the same a branch of the State University, for instruction in agriculture, the mechanic arts, and the natural sciences connected therewith.

SEC. 10. All the public schools, colleges, and universities of this State, supported in whole or in part by the public funds, shall be free and open to all the children and youths of the State, without regard to race or color.

SEC. 11. The proceeds of all lands that have been or hereafter may be given by the United States to this State for educational purposes, and not otherwise appropriated by this State or the United States, and of all lands or other property given by individuals, or appropriated by the State for like purposes, and of all estates of deceased persons who have died without leaving a will or heir, shall be securely invested and sacredly preserved as a State school fund, and the annual interest and income of said fund, together with such other means as the general assembly may provide, shall be faithfully appropriated for the purpose of establishing and maintaining free public schools, and for no other purposes or uses whatever.

ORDINANCE X.—AN ORDINANCE instructing the general assembly to provide for appropriating the citadel for educational purposes. Passed March 16, 1868.

We, the people of South Carolina, in convention met, do ordain: That the general assembly is hereby instructed to provide, by suitable laws, for the appropriation of the citadel grounds, in the city of Charleston, for educational purposes, said building and grounds to be devoted to the establishment of an institution of learning, which shall be a body politic and corporate, and shall be managed by a board of trustees, and their successors, who shall be chosen by the general assembly, and shall be subject to visitation by and under its authority. Said institution of learning shall have power to establish schools of law and medicine and to issue diplomas that shall entitle the holders to practice said professions, as shall be prescribed by law.

At the election held in the same month (April, 1868) Mr. Justus K. Jillson was chosen State superintendent and the several counties elected school commissioners. "An act to provide for the temporary organization of the educational department of the State" was passed and ratified September 15, 1868. On September 28 Superintendent Jillson sent a copy of it to the new school commissioners. This act of nine sections provided that the State superintendent of education should hold office through four years, give bonds for \$5,000, and receive a salary of \$2,500 annually, with the expense of traveling and the use of an office. His official residence was to be at the State capital. He was directed to immediately provide for taking a census of the youth of school age

(5 to 18 years) by the county school commissioners. The school population of the city of Charleston was to be returned by wards. The school commissioners of each county were also directed to report the number of public schools and their attendance, also their condition and methods of support, and these reports were to be consolidated and forwarded to the general assembly by the State superintendent. The county commissioners were to receive \$4 for each day actually employed in the foregoing duties, with cost of necessary transportation, and the governor of the State might employ assistants for the commissioners in taking the school census at the rate of \$2.50 a day for a limited time.

On January 24, 1870, Superintendent Jillson made his first report to Governor Scott and the general assembly. Several of the county commissioners had failed to qualify and others had failed to report. Beside this, "the failure of the general assembly to pass a school bill at its last regular session has been the means of keeping this department in a state of comparative inactivity for nearly a year. The children and youth of this Commonwealth are daily growing up in a state of ignorance, a state which leads to poverty and crime." The work contemplated in the act for temporary organization to be done by the county commissioners had been greatly delayed, owing to "causes entirely beyond my control, and which in some instances have not been satisfactorily explained." From such reports as could be obtained through them it appeared that there were in 26 of the 31 counties 168,819 children between the ages of 5 and 18, 68,108 white and 100,711 colored, 88,413 male and 80,406 female. From returns from 20 counties it appeared that there were 381 public schools, with 528 teachers, 73 being northern white, 405 southern white, and 50 colored; 16,418 children were "attending school," evidently enrolled, as Superintendent Jillson during his entire administration of eight years never gives the average attendance; the number of white and colored and the sexes were nearly equal. The city of Charleston reported 9,260 of school age, nearly equally divided between the races.

There were in the State at this time several schools for colored youth established and supported by different educational and ecclesiastical agencies in the North. It was impossible to ascertain from the reports received from the public school officers the effect of the constitution and school law upon the people of the State. But the commissioners from 18 of the 31 counties declare that the "mixed school" is a practical impossibility, the colored as well as the white parents preferring separate schooling for their children. Very few of the "poor whites" could read or write. Whole sections of the country are described as "filled with poverty and ignorance," but everywhere the poorest people are said to greatly desire education for their children, and in many cases contribute from their poverty to keep alive such arrangements as they have.

On February 16, 1870, was approved "An act to establish and maintain a system of free common schools." This act, in connection with the constitutional provision above given, was sufficient to realize the ideal of the most radical schoolman of the State. It, indeed, proposed a scheme in some particulars in advance of the large majority of the Northern States at this period, and in one respect even of the State of Massachusetts, from which the new superintendent had come. But it was practically impossible that the State of South Carolina, in 1870 and during the five following years, could support a free system of public schools six months in the year, with the addition of large city and State universities and a normal school. A fatal weakness also in the system was that the new superintendent of education really had no power to act in any region of his almost boundless office. The county commissioners were elected by popular vote, including the votes of the colored race. The State school funds were in no

respect under the control of the State superintendent save in their distribution to an irresponsible class of officials. His required duties were chiefly those of an official clerk and prevented any visitation through the State or any personal acquaintance with the county commissioners. The election and examination of teachers were beyond his control. For the eight years of his service he was called to stand a helpless spectator of the goings on of the legislative and executive departments of the government; to submit to the disposition of the commissioners, and deal with the statistics of the teachers, and the indifference of the commissioners, with their chronic neglect to make proper reports of their doings, added to several years' failure to get a quorum for a meeting of the State board.

It is not strange that this new school law should at once provoke a concentration of all opposition to progress in the face of the harassed and confused superintendent, a young man elevated from the position of schoolmaster of a Massachusetts town of 1,000 people to the first superintendency of education of 200,000 children and youth in a Southern Commonwealth. In his second report, dated November 15, 1870, he predicts that the mixture of politics with school affairs "will be the harbinger of disaster, ruin, and failure to our common school system." The bottom difficulty of the whole matter, of course, was the almost complete incompetency of the teachers employed in such schools as were placed on the ground, especially those for the colored people. The legislature, although composed of the party favoring the then existing dynasty and elected largely by the votes of the colored people, was either ignorant, indifferent, or culpably insincere in its dealings with the public school interest through the entire period of reconstruction. While the provisions of the school law were really, in some respects, in advance of the systems in half the Northern States, the legislature only appropriated \$50,000, in addition to the poll tax, for the support of a system requiring a million for its vigorous administration. The poll tax was a very questionable reliance and very difficult of collection.

Only 12 of the 31 counties had made complete returns of the scholastic population, and the superintendent was compelled to rely on the State census of 1869 for information; 30,000 children of the 197,000 of school age had been enrolled during the year 1869-70, probably not more than 50 per cent in average attendance; 630 schools had been either wholly or in part supported by the State during the year 1868-69, with 734 teachers and 23,441 pupils, the State contribution being \$57,320.40. Besides this, Charleston reported 4 schools, 66 teachers, 5,252 pupils in attendance, and \$20,629 expended. The University of South Carolina had been taken in hand. One free student from each county could be admitted—white or colored, male or female. The superintendent submits an estimate of the sum required to carry on the schools of the State during the ensuing fiscal year, amounting to \$550,700.

On March 6, 1871, was approved an act amending the act of February 16, 1870, "to establish and maintain a system of free common schools." In its amended form it was an elaborate statute, framed to cover the entire field of educational experimenting. By this law the State board of education was to consist of the 31 school commissioners, the State superintendent of education being chairman. The State superintendent was to be elected by the people and serve for four years, with a salary of \$2,500 and mileage. He must do the impossible by visiting every county to inspire the people, and diffuse himself generally. The county commissioner of each county was to be elected once in two years by popular vote. Each county was to be divided into school districts, and district school trustees were to be appointed for two years by the board of county school examiners. This board was to consist of the county commissioner and two other members appointed by him, "competent to teach a first-grade school," and was

to examine and certify teachers for one year. The school year was to continue nine months, but county commissioners could limit the school year according to the supply of funds.

In his third report, issued November, 1871, covering the year ending June 30, 1871, Superintendent Jillson congratulates the legislature "on a reasonable degree of progress," of which the proofs are found in an increase in the scholastic population, which numbered 206,610; a school attendance of 66,056, more than double that of the preceding year, and about equally divided by races. The number of schools was 1,639, an increase in one year of 870. There were 460 school districts. Only 1,334 of the pupils were reported as in the higher branches, but this was double the number of the previous year; 1,898 teachers were employed, 1,185 male and 713 female, at equal average salaries of \$25 per month. In the public schools of the city of Charleston male teachers received an average of \$125 a month, female teachers \$40. One hundred and four school-houses had been built in the State, 63 log and 41 frame, at an expense of \$13,254. Three teachers' institutes had been held, attended by about 100 teachers. No school text-books had been distributed. The estimate for the school fund the ensuing year was \$344,000 besides the capitation tax. No funds had been at hand for the purchase of school records or registers, and consequently none had been distributed to the teachers. The University of South Carolina had an attendance of 68 students of both races and sexes. The legislature had appropriated \$31,000 for its support and for repairs. By a report from one of its professors we learn that during the last seven years before the outbreak of the war, when the average number of students was 182, there were 165 from the State and 10 per cent from outside. There were also flourishing colleges at Charleston and Greenville, in South Carolina, besides Davidson College, just over the line in North Carolina. Moreover, there were upward of 200 students from South Carolina in colleges outside the State. All this went to show the prosperous state of the higher education just before the war. In 1866, however, there were only 108 students in the South Carolina University, and 113 in 1867, while in 1868 it further fell to 65, of whom a considerable number were girls and colored pupils. Under these conditions the old professors retired. In 1869 there were but 42 students, and in 1870 and 1871 there were 53 and 68, respectively. During the past four years only 120 students from South Carolina had been found in colleges out of the State. Of those in the university only 22 took the usual academical course, 11 the medical, 14 the theological, and 6 the law.

The city of Charleston was the only portion of the State where educational affairs had a cheerful outlook. The city covered an area of 6 square miles, had a tax valuation of \$27,565,437, with no local tax for schools. Of a scholastic population of 12,727, one-half colored. 5,068 were in attendance in the 4 public schools, 3,322 white and 1,746 colored. The schools were in session nine months in the year. There were 68 teachers, 4 males (principals) and 64 females. The great Morris school for colored children of 1,500 pupils was taught entirely by white teachers, all, save the principal, white ladies of Charleston. The teachers' salaries during the year amounted to \$36,828.25, of which \$17,408.10 were still due. It was estimated that the sum of \$44,680 was required by the schools for 1872.

The superintendent was fully alive to the fact that he, as a public official, "is vested with no jurisdiction, no supervisory and discretionary power whatever, but is, in fact, subject to the will of subordinate officers of the department of which he is only the mere figurehead, and that his functions are simply ministerial and clerical." In this fact is found the key to much of the confusion and mismanagement that involved the public school affairs of the State during the eight years of the reconstruction period. The superintendent was intelligent,

earnest, and by universal consent regarded as honest and deeply concerned for the education of the people. The people responded by an encouraging attendance during the last year of his administration, amounting to nearly 100,000. And doubtless there was a good deal of respectable teaching in the Commonwealth. But the legislature persistently refused to furnish the proper means for the payment of even what was done, every year witnessing a deficiency, while the means actually raised were not distributed. At the termination of this administration the deficit, largely due to the teachers, was so large as to be a continual embarrassment during the four years' administration of Supt. Hugh S. Thompson. During the financial year ending October 31, 1871, the free school fund consisted of \$150,000 and the capitation tax. The superintendent did not believe that any provision of law for local taxation for schools could be enforced. "The people of this State are not, as a general rule, sufficiently advanced in civilization and public spirit to impose voluntarily upon themselves a tax to be applied to the education of their children," and if such a tax were levied "the work of assessing and collecting it will be extremely difficult," besides, the Attorney-General had pronounced the penalty on districts for failure to raise tax required by law as unconstitutional. He recommends a special State tax for the support of free schools, and that it be declared a misdemeanor for the State treasurer to divert the proceeds of such school tax to any other purpose. The county treasurers should be held to a strict accountability for their handling of the school funds. A special appropriation of \$44,680 made for the city of Charleston should be the entire sum received by that city. The commissioners of only 22 of the 31 counties attended at the meeting of the State board of education in October, 1871. A committee of the board reports "an unfortunate state of affairs" in the distribution of the State school fund. "But little of the general appropriation has been paid, and several unpaid balances of previous appropriations are yet due." This is regarded "an irreparable injury to the cause of education in this State." The State had collected taxes to the extent of perhaps over \$1,000,000. A special committee of five was appointed to procure a mandamus to compel payment of the orders of the State superintendent and enforce the provisions of the law. In 1868 the legislature had accepted the donation of public lands for an agricultural and mechanical college. The old College of South Carolina had been reorganized in 1869 as the University of South Carolina, with no distinction of race. Seven trustees appointed by the general assembly established a tuition fee of \$50 for the departments of law and medicine and \$15 for all other departments. A preparatory school was established. Even the teachers for the year 1867 had not been paid as late as 1868-69. The general delinquency of the legislature was shown in the perpetual ignoring of the claims of the school department, where no one was clothed with power to enforce any law.

The fourth report of the superintendent, covering the school year ending June 30, 1872, only confirms the impression that "there are inevitable weaknesses in the organization of the system that can not fail to work its ruin." The number of children had increased, there being 209,347 between 6 and 16, and the attendance was increased by 10,266 to 76,322, Charleston County having the largest attendance (7,834) and Georgetown the least (823); there was a corresponding increase of 280 in the number of schools, 1,919 in all, although 11 counties show a decrease; 26 counties report an average school term of five months, and 5 make no returns. There were 462 school districts, reporting 226 schoolhouses as having been erected during the year at a cost of \$11,505.50, namely, 127 log, 98 frame, and 1 brick. The city of Charleston reports a school attendance of 3,970 out of its 12,727 school population, only 176 being in the higher branches.

But while the majority of the people, despite the profound dissatisfaction with the mixed system, were earnestly bent on education and were making up their minds to get it at all hazards, the difficulty at the State House was more exasperating than ever. The school-teachers seemed to be shouldering the heavy end of the system, and their service was largely a labor of love. The sum of \$268,091.67 was paid for salaries of teachers during the year. In his general remarks the weary superintendent frees his mind to the legislature concerning the impending collapse of the entire school system as then mismanaged at the statehouse, asking that, "in behalf of humanity," the legislature shall mend its ways in respect to the schools. "The whole system is, in its present condition, a reproach to those who claim to be its friends and advocates." "Our whole State policy, as far as common education is concerned, has been from the beginning narrow and illiberal. While other enterprises and interests have received due attention and proper care, the education of the people has been a matter of the last and least consideration. The rights of bondholders have been guarded and made secure; railroads have received material encouragement; those boundless fields of wealth, the phosphate deposits, have been carefully fenced in and developed; liberal and elastic charters have been granted to banks and other corporations; victims of political persecution have found consolation in the enjoyment of lucrative and dolce far niente positions; even the birds of the forest and the fishes in the rivers have been protected, but the schools have been left to take care of themselves, and the poor school-teachers have been constrained to toil and starve or else to abandon the profession."

Superintendent Jillson's fifth report (1872-73) stated that the population of South Carolina, according to the census of 1870, was: Colored, 415,814; white, 289,667; Indians, 124; Chinese, 1; total, 705,606. The State ranked 22 in population, with an average of 23.39 persons to each square mile, the entire area being 30,170 square miles. The property valuation of 1873 was \$167,481,092.67 as assessed, although the United States Census of 1870 placed the true valuation at \$208,146,989. The school population had risen to 230,102 in 1873, an increase of 32,923 in four years. There had been an increase of 98 common schools in the last year, although a decrease occurred in 11 counties. The superintendent seems to have made few visits, not having been present at many of the State teachers' institutes. The university had 69 students; the superintendent had no information concerning the disbursement by the State treasurer of the appropriation of \$27,850 for its support, but he knew that no portion of the appropriation for repairs of buildings (\$2,000) had been paid by him.

The superintendent bewails the "humiliating fact" that thousands of the children of the State are growing up in ignorance. He repeats the protest of former years and urges reform. A "great awakening" at last persuaded the legislature to authorize a school tax of 2 mills on the dollar on all taxable property of the State and to anticipate its collection by the appropriation of \$300,000. Two hundred and seventy thousand dollars of the tax had been collected. Only \$56,492.70 had been received from the poll tax. From the constant complaint of the neglect, incompetency, and delay of the county commissioners it is evident that there never had been at the State superintendent's office any correct knowledge of what was going on through the State.

From Superintendent Jillson's sixth report (1873-74) it appears that the superintendent of the public schools of Charleston reports 5,512 in attendance, and requires \$54,760 for the support of the system; \$23,640 had been received from State appropriations and \$23,358 was from a local tax, with other funds, making \$62,589.16 in all. The State superintendent had attended meetings of the National Educational Association and Department of Superintendence in

the North, although he emphasizes the fact that he will be obliged to neglect official visits at home, his presence being required in his office through lack of clerical assistance.

The State Normal School had been opened in September, 1874, with Mr. M. A. Warren, late of the Shaw Institute, of Charleston, as principal, assisted by 1 lady. Thirty-eight students had been admitted from 9 counties. The lack of funds withheld by the State treasurer had caused serious difficulties. "The credit of the State being well-nigh gone, it was impossible to obtain any necessary supplies except upon payment of cash."

By the act of the legislature the portion of the Congressional land grant for agricultural schools due the colored race was appropriated to Claflin University, a flourishing school for colored youth established in Orangeburg by the aid of the family of Governor Claflin, of Massachusetts, under the management of Rev. E. Cooke, D. D. In 1875 there were 209 students in attendance, and it offered courses of study ranging through graded and high school work, including the ancient and modern languages, but with special attention to the training of teachers for the colored schools. The legislature had made it a portion of the State system of education by subsidizing it from the agricultural and mechanical fund, although at this time the appropriations were very limited. At a subsequent date this school was included in the university system of the State and became the possessor of a valuable landed property, with a notable reputation for industrial training and the largest attendance of any institution of this class then in the South. The State Normal School, located on the campus of the State University, had received grants during the three years ending October 31, 1875, amounting to \$35,600, of which only \$16,458.53 had actually been paid in, leaving an unpaid balance of \$19,141.47.

Superintendent Jillson calls attention in his seventh report (1874-75) to the fact that the 2-mill school tax in 1875 amounted to \$11,378.13 in excess of the \$240,000 appropriated by the legislature for the support of public education, and that this sum "was swallowed up in the so-called suspension of the South Carolina Bank and Trust Company," and demands the refunding of the same. Several county treasurers had school funds on deposit in this bank. The \$139,721.17 (an increase of \$19,985.85 over the previous year) raised by local and district taxes suggested to the superintendent that "the future success and efficiency of our common school system will depend upon the public spirit of the people on the question of local taxation."

The last report of Superintendent Jillson, the eighth of the series, was made in 1876, and gives the results of his troubled administration of eight years. The population of the State had increased 219,539 from 1870 to 1875, or 31 per cent in five years; the assessed valuation of taxable property in 1876 was \$133,133,338; the United States census of 1870 gives nearly twice the amount in true value. The school population was stated as 237,971, of whom 123,085 were said to be in attendance on 2,776 schools taught by 3,068 teachers at average monthly wages of \$30.40 for males and \$28.86 for females, while one county paid an average of but \$15.34 by the month for the term of four and one-half months to males. The schools were in session in different counties for terms varying from seven to two and one-half months, and the public schools of Charleston ten months. The school revenue was stated at \$457,259.84, of which \$146,493.57 was from local taxation, \$202,662.05 from the State, \$62,250 from the poll tax, \$3,850 from the Peabody fund, and \$42,003.98 from other sources. It was estimated that for a school term of nine months \$900,000 would be needed; for six months, \$600,000; for three months, \$300,000. The State board of education seemed to be defunct, as "no quorum had been reported for three years." This

year the superintendent visited 10 counties of the State; 26 visits in all. A long list of unpaid State appropriations was reported.

It has seemed important to give this somewhat extended report of the beginnings of the common school system for all children and youth in the State of South Carolina from the year 1868 to 1876. Whatever may be charged upon the reconstruction government during the period of eight years, there can be no doubt that the best thing effected by it was the introduction of the American system of schools for all people. For two hundred years the common school public of South Carolina, including some of its most eminent men, had labored in vain to plant outside the city of Charleston anything like a successful system of public education for its white children. Now for the first time, amid almost impossible conditions, the act was consummated, including the entire school population of the State. It was a mistake that well-nigh swamped the enterprise to endeavor to school the races together. It was apparently a visionary idea to imagine that the people of the State at the close of the war, or ten years later, were able to support the elaborate system of public instruction drawn up for its use by men inexperienced as educators, thoroughly unconnected with southern society, and uninformed with regard to southern affairs. But with all its mistakes the experiment did not fail. It was a great thing to commit the old Commonwealth to the American idea of universal education; to secure appropriations from the legislature, even if they were not paid with regularity; to awaken into life a body of 3,000 native teachers, however destitute many of them may have been of high qualifications for this great profession, and make it possible that the people should tax themselves to the extent, in 1876, of \$130,000, for the support of the district schools.

The change wrought by the decision of the contested Presidential election of 1876 was nowhere more appreciated than in the State of South Carolina. This decision brought to the front a State government containing several of the most eminent public men of the Commonwealth, Gen. Wade Hampton being the governor. But among this body of men no man was intrusted with a more important function than the new State superintendent of education, Col. Hugh S. Thompson. This gentleman was a native of the Piedmont region. As a graduate from the military academy of Charleston Mr. Thompson entered the Confederate service, and through the war was retained in and around the city. On the coming of peace he found himself at Columbia, and, by the destruction of the large property of his father-in-law, was thrown entirely on his own resources. He opened a school for boys, and during the years of reconstruction made an impression on the foremost people of the capital city which secured his nomination and election to the post of the State superintendent of education.

"When the general assembly met in April there was no one who could give information as to the operations of the public schools up to that time," Superintendent Thompson states in his first report (1877). It was believed that the public schools had generally been closed since January 1, and that the \$100,000 voted for the support of them and the poll tax would be available for their opening. Certain changes in the school law were at once made by the legislature, among which was the provision to levy local taxes for schools by the aided districts, also the provision for free scholarships in the State University. The university itself was placed in the hands of a board of competent men to hold and keep the leadership, with instructions to reorganize the university system on the plan of one institution (the State college) for white, and another for colored students. The State university, thus created by the reorganization of the State college, at Columbia, and the Claflin University, at Orangeburg, for colored students, was placed in charge of a board of trustees consisting of the

governor, State superintendent of education, the chairman of the committees on education in the house and senate, and seven additional members elected by the general assembly for four years. The South Carolina Military Academy, at Charleston, was also made a branch of the university, the three institutions being under the direction of the one board. The agricultural and mechanical department established from the Congressional land grant of 1862 was included in this arrangement. The tuition fees were all included in \$40 a year.

But while these changes were being made, with the more important work of promoting the ratification of a constitutional amendment concerning the method of support for common schools and the framing of a new school law, the affairs of the department were found in a state of very great confusion. The rock that stood across the path was the heavy load of debts due the teachers for past services. At the last accounting, in 1877, the State was indebted to the teachers of the different counties in the sum of \$184,704, and this large sum was only an estimate, as several of the counties had not reported and a mass of disputed claims hovered like a threatening cloud over the treasury. A law of 1874 had appropriated the poll tax to the payment of this class of deficits. This act, though declared unconstitutional by one, was officially established by another decision of the supreme court as constitutional, in August, 1877. This decision annulled the action of Superintendent Thompson in ordering the poll tax to be included in the fund available for school support and deprived the schools of this important addition to the general appropriation. The superintendent recommends that the law of 1874 be repealed and that some plan be arranged by the legislature for the payment of the debt. He also urges the ratification of the constitutional amendment authorizing the laying of a State tax for education of 2 mills on the dollar, the avails to be held by the treasurer of each county and paid out for the support of its own schools. This plan, although different from that usually adopted in the North, in which the avails of State taxation are distributed per capita or otherwise among the entire school population, seems to have been as far as the people of this State could be persuaded to go under the circumstances prevailing in 1877. During the political campaign of 1876 both the political parties were pledged to the liberal support of a public school system. The constitutional amendment authorizing the tax had been indorsed by a popular vote of 25 to 1 at a subsequent election. The superintendent accordingly urges its ratification by the general assembly. The amount raised under it would not be excessive. It would make the school fund, exclusive of the poll tax, not over \$250,000 the next year. Allowing the meager salary of \$30 per month for the 3,068 teachers of the 123,085 pupils in the schools, \$92,000 a month will be needed to pay the teachers' salaries alone. The passage of an act similar to the law in force in Charleston, permitting all incorporated towns to levy additional taxes for the support of schools, was recommended. The superintendent boldly declares that many of the county commissioners "are unequal to the task which they have to perform. The boards of trustees appointed by such school commissioners are generally unfit for their duties." The State superintendent "had no power to remove any school officer for any cause." Dr. Barnas Sears, general agent of the Peabody education fund, had made a grant of \$200 to pay the expenses and board of certain persons assisting in the revision of the school laws of the State. These were six in number, and were all men of learning and ability, summoned by the State superintendent for the purpose stated. For three days they went over the ground, with the result that a new law was framed, which proved a great agency in the progress of the schools. Superintendent Thompson in all his remarks on the past enforces the fact that, with all its defects and too often deplorable infirmities, the

common school system established in 1867 was a great and good new departure for the public. Despite the inexperience and often questionable policy of the legislature of the reconstruction period, and especially the overdoing of the entire movement by officials who had no practical knowledge of the affairs of the State, it already in those troubled years had lifted the school attendance from 25,000 to 123,000, appropriated a sum of \$200,000 to \$300,000 annually, called into being several thousand schools, and summoned 3,000 young people of the Commonwealth to the responsible post of teachers of the children. After a careful estimate of the value of every provision, aided by a consideration of the laws of other States in all sections of the Union, a new school law was framed which was subsequently enacted by the legislature without material alteration, and which, with occasional amendments, has been retained for years past as the foundation for the school system of South Carolina.

The main provisions in which the new school law differed from the old were: (1) The change of the old State board of education to a State board of examiners, composed of the State superintendent of education and four persons appointed by the governor with consent of the senate. To this board large powers were assigned, making it a central board with power to interpret the school laws and enforce its decisions. (2) The law requiring the payment for school books by the State was omitted. (3) The taking of the special census of school children by the local school authorities was left out and reliance placed on the national and the State general census. (4) Important changes in the manner of paying the county school commissioners were made. (5) County boards of examiners were to be appointed by the State board of examiners, and not by the county commissioners. Each county board of examiners was to consist of the county school commissioner and two additional members appointed by the State board from men "competent to teach a first-grade school." This board of county examiners was required to examine all teachers, to divide the county into school districts, and appoint three school trustees for each district for two years. (6) The district trustees should take the management and control of the local educational interests of the district, subject to the supervision of the county board of examiners. (7) The poll tax should be disbursed in the district where it was collected.

Here was a law which, as far as protection from the abuses of the past was concerned, was a great check against plunder and incompetency in official places. Indeed, it was a great thing even to get on the ground a free-school law for white pupils alone, much more for all the children of the State. This law, as already stated, was adopted by the legislature substantially as framed by the superintendent, and remained, with occasional changes, the school law of the Commonwealth until 1896. Under it the State has grown up to the establishment of a broader and more effective educational policy.

In 1877 the scholastic population, 6 to 16, was reported to be 228,128—\$3,813 white and 144,315 colored—but the returns are declared to be "very defective." There were 437 school districts and 2,483 public schools; 11 counties reported an increase and 21 a decrease during the year 1877. The school attendance was 102,396, a loss of 20,689 for the year, largely in the colored pupils; 2,674 teachers were employed, 1,725 white and 949 colored, only 957 of first grade. The average salary was \$28.32 for male and \$26.87 for female teachers per month, ranging from \$121.66 for males and \$39.23 for females in Charleston city to \$7.55 for male and \$6.13 for female teachers in Oconee County. Only 2,546 pupils are reported as pursuing the "higher branches." The average school term was three months; 2 counties had five and 1 county one; the city of Charleston ten months. Only 25 new schoolhouses had been erected, 13 of which were log, but "information concerning schoolhouses was very incom-

plete." The school receipts for the year were \$189,352 (excluding poll tax) and the expenditure \$226,020.62. The city of Charleston had a revenue of \$64,202.19 and levied a local tax of $1\frac{1}{2}$ mills on the dollar, yielding \$53,965. Its school attendance was 6,713, about equally divided by race; 401 pupils in the higher branches.

Such was the condition when the new superintendent, Thompson, assumed the duties of the office, which he administered with such conspicuous ability for six years, during 3 terms of two years each, and from which he was promoted to a service of 2 terms (four years) as governor of South Carolina, followed by a period of service in the National Government, as assistant United States treasurer and chairman of the United States Civil Service Commission, from which he retired to an important position in a life insurance company in the city of New York. At the opening of his second report, dated November 25, 1878, the superintendent declares that during the past year the public school system of the State has made gratifying progress. "While the results which have been accomplished may not yet be fully apparent, it is believed that an examination of what has been done will encourage the friends of public education." He claims, as evidences of progress, (1) the provision of the constitution requiring a tax of 2 mills on the dollar for the schools; (2) the new school law, approved March 22, 1878; (3) the increased attendance on the public schools, 116,239, being 13,843 beyond that of the year 1877; (4) the adoption of a uniform system of text-books by the State board of examiners; (5) the interest which the teachers are showing in their work gives promise of greater usefulness in the future; (6) the management of the school funds has been better than at any previous period; (7) the formation of a State board of examiners has created a new era in public school affairs, since only in this way can be obtained a body of teachers under the control of the State authority competent to preside over a State educational system. The executive wisdom of the superintendent is apparent in his plain statement of "some of the obstacles in the way of rapid progress." These are, (1) the results of popular election for school commissioners; (2) the indifference in some localities to education and prejudice against public schools; (3) the delay in the collection of the school tax; (4) lack of normal schools—"normal schools for training teachers must be established before the public school system can be made to do all the good it is capable of doing;" (5) the insufficiency of the school fund.

Superintendent Thompson followed the precedent set by Horace Mann, of Massachusetts, and Superintendent Ruffner, of Virginia, in devoting a good portion of each of his annual reports to a discussion of the subject of common school education and answering the oft-repeated disparagement of the system. With a majority of 200,000 colored population less than twenty years emancipated from chattel slavery, the State of South Carolina should have at heart but one supreme problem—to find out the most expeditious method of lifting at least an influential minority of this vast body into the range of the new American civilization offered them by the National Government. The superintendent in his third report (1878-79) asserts that "the improvement in the schools for the colored population has been specially marked." He shows that while during the period of reconstruction, from 1869 to 1876, the average school attendance of the colored pupils was 41,691, their average attendance during his administration from 1876 had risen to 60,723, an increase of more than 45 per cent. A notable instance of this enlightened policy of encouraging negro education is set forth in the city of Charleston. In 1867 the Morris street public school was opened for colored pupils, the members of the school board being leading citizens of Charleston. The attendance previous to 1870 at no time exceeded 900. During the period from 1871 to 1879 the attendance had in-

creased to 1,400, with an average attendance of 93 per cent, under 26 teachers. The white principal of the school was a distinguished ex-officer of the Confederate army, and the remaining teachers, white, were all natives of the city and State. Before the earthquake the city of Charleston taxed itself a larger rate on the dollar for education than many of the leading cities of the North, although still not able to reach more than half the school population. In addition to this, the superintendent called attention to the fact that the only institution for the higher education in South Carolina which then received State aid was Claflin University and College of Agriculture, devoted solely to the education of the colored race, subsidized by \$7,500 annually. Here, during the three terms, an average of 180 pupils were instructed by a corps of chiefly white teachers, two of whom were natives of the State.

The superintendent calls attention to the fact that "during the past year the public school cause has attracted unusual attention" at public meetings and in the press. He devotes a considerable space in his report for 1878-79 to answering the popular objections to the system. The objectors he divides into three classes: (1) Those who deny the right of the State to control education; (2) those who object to public school education; (3) those opposed to the system then adopted. He points to the schools of Charleston and Winnsboro in the State as illustrations of what the public schools had already accomplished in South Carolina and are accomplishing on a more extended scale in other States. A reliable table is published showing the method of support of the public school system in 27 States of the Union, in 23 of them the local tax income being greatly in excess of all received from State taxation or from other funds. Another table gives the expenditure per capita of the school population and of the average attendance. Another plea is put in for the establishment and support of a State normal school. An unappropriated fund could be made available to some extent, and the agent of the Peabody education fund would contribute \$5,000. The Claflin University for colored students was already shaping its course of study in the direction of normal training. The public school attendance had increased 6,224 during the year.

The year 1880 closed the second term of two years of the administration of the educational affairs of the State by Superintendent Thompson. He improves the opportunity to set forth the progress already made since 1876, including an increase of 31,676 in school attendance; the doubling of the State school fund and its improved management and disbursement; one-half month added to the school term; 497 additional teachers employed and 490 additional schools established; good progress in the payment of the indebtedness of \$210,000 owed by the counties to their teachers, chiefly through the diversion of a portion of the poll tax to this purpose; the State school tax of 2 mills established; a new school law enacted; a uniform series of text-books prescribed; a steady improvement in the teaching force, and the payment of teachers' salaries at the par value of their certificates of payment. All this could be honestly claimed as the results of his administration of four years.

The most important new departure of this year was an effort, more vigorous than before, to increase the value of the education imparted and to stimulate the demand for more by the improvement of the quality of the teachers, which became a notable characteristic of the administration of Superintendent Thompson. In 1880 Doctor Sears, agent of the Peabody education fund, offered \$1,000 to be expended for teachers' institutes. It was wisely concluded to expend this sum in the organization of a State institute for the white teachers of the Commonwealth, at the city of Spartanburg. The faculty of Wofford College gave the free use of its buildings, and the people of that interesting city welcomed the coming of the teachers with the hospitality characteristic of the State. Dr. F.

Louis Soldan, the principal of the Missouri State Normal School, subsequently superintendent of the public schools of St. Louis, Mo., was the principal of the institute. Prof. E. S. Joynes, of the State university of Tennessee, at Knoxville; Mr. Henry P. Archer, afterwards superintendent of the public schools of Charleston, and others were engaged in the work of instruction. The amount paid these gentlemen was barely sufficient to cover their expenses, and their united work was in the best sense "a labor of love" for the teachers. In connection with the course of instruction, both academical and professional, and lectures by the faculty of the institute, there was offered a series of valuable popular addresses by several of the leading educators and public men of the State.

It is difficult to estimate the influence of this new departure, which had already been taken in several States of the South, but had an especial significance in South Carolina. The greatest obstacle, as has already been stated, to the development of the common schools of the State was the absence of any common educational public opinion and cooperation; the exaggerated idea of personal, local, district, county, and city independence that looked askance at all attempts at concentration, even in a matter so important as the schooling of the children for good citizenship. Under these circumstances such meetings as were called and held year by year by the State superintendent were of extraordinary importance, as they instructed the professional and amateur teaching force of the Commonwealth in the great art of "working together for good."

During the month of October, 1880, a county institute for colored teachers was held in the city of Charleston, under the supervision of Bishop P. F. Stevens, the school commissioner of the county.

The entire outfit of the State of South Carolina at this time for the higher education was confined to 8 institutions of proper college grade, including the South Carolina College of Agriculture and Mechanics, at Columbia, and the Claflin University for colored students, at Orangeburg. Five of these institutions were in connection with the different religious bodies of the State. With the addition of several female seminaries of the better sort there were 12 colleges. In addition to these there were 49 public academies or high schools, 81 private academies or high schools, 208 private elementary schools, and 2,973 connected with the public system of the State. In 1881 the State school fund had reached the sum of \$452,000. The average school term was three and two-thirds months; in 1 county, six; in 5, from five to five and three-fourths; in 5 from four to four and two-thirds; in 15, from three to three and three-fourths, and in 6 from two to two and one-half months. School attendance remained about as during the preceding year. All the favorable indications mentioned in former years could be repeated at this time.

In Dr. J. L. M. Curry, the successor of Doctor Sears in the general agency of the Peabody education fund, the State of South Carolina found an able and zealous friend and cooperator with the State authorities. With the aid of a State appropriation added to the constant donation from the Peabody fund a second State institute was held in the city of Greenville under the same able supervision as the first. Professor Soldan and Doctor Joynes labored during four weeks in the buildings of the Furman University in that city. There were 335 teachers enrolled; nearly all the counties of the State were represented; 270 persons were in attendance on several of the morning exercises. A corresponding institute for colored teachers was held at Columbia, the capital city, during the four weeks of July, which was attended by 200, under the direction of Mr. H. P. Montgomery, of Washington, D. C.

The six years closed by the retirement of State superintendent of education, Col. Hugh S. Thompson, who had been for three terms of two years each elected

to that office, in more than one respect should be classed with the memorable periods of service of Horace Mann, of Massachusetts, and Dr. William H. Ruffner, of Virginia, as the revival period in the interest of popular education in their respective States. On his retirement in 1882 the superintendent shows that, since 1876, the number of schools in the State had risen from 2,483 to 3,183; the number of teachers had increased from 2,674 to 3,413 in all; the school attendance had increased from 102,396 to 145,974, the largest number ever attending school in the State. The school fund in 1881 was \$452,965.44, an increase in four years of \$263,613, and the largest sum ever appropriated for public schools in the Commonwealth. The average length of the school session was four months, a gain of a full month. The average length had suffered from the diversion of a portion of the poll tax to the payment of the deficit of \$269,000, besides a number of unpaid claims which were left by the outgoing government of 1867-1876. Twenty-seven counties had resorted to this method of paying off their portion of the debt. At the close of Superintendent Thompson's administration there was a deficit of \$34,575.13, all save a few small portions dating from the year 1877, the heritage of the then incoming administration.

The toning-up of the examinations of teachers, the regular payment of their small salaries, and especially the influence of the three State institutes, had succeeded at last in developing a superior class among the 3,000 persons engaged in the work of instruction, who henceforth were everywhere in the Commonwealth to become a permanent agency for improvement. The third session of the State Teachers' Institute, held in 1882 at the State capital—Columbia—during the month of August, under the direction of State Superintendent M. A. Newell, of Maryland, was one of the most profitable sessions ever held in South Carolina in behalf of universal education. The legislature had at last been awakened to the importance of this movement, and had appropriated \$1,500 for each of the two last sessions, supplemented by grants (\$1,400 in 1882) from the Peabody education fund, Dr. J. L. M. Curry, agent. Several county institutes, or rather associations, had meanwhile been held, and a State institute for colored teachers had been one of the features of the movement for the elevation of the profession. The establishment of a permanent State school tax was one of the vital achievements of the administration of Superintendent Thompson. It relieved the system from its previous dependence on the members of the legislature for annual appropriations. The constant effort of the superintendent was to supplement this by a general law, authorizing the towns to vote a local tax for graded schools under safe limitations of the suffrage. But this proposition failed, as other good things failed at this time.

Two important steps in the development of the higher education were taken during the closing year of Superintendent Thompson's administration—the reorganization of the South Carolina College at Columbia, and of the State Military Academy at Charleston. The South Carolina College had been partially reopened in 1880 and supported exclusively by the income of the agricultural and mechanical college land fund donated by Congress in 1862, but with a very limited attendance. During the session of 1882 the general assembly voted a provision that raised this old and important college to its former condition, and a similar appropriation for the opening of the State Military Academy gave to the trustees the power to place that school on even a wider basis than ever before; the United States Government had withdrawn from its occupation of the citadel buildings, and the school once more resumed its accustomed work. In addition to these two State institutions for the white and a third for the colored race, there were now six colleges for white students and a variety of academical schools, in some respects better than ever before. The superin-

tendent visited officially nine of the counties, including the leading cities of the State, during his closing year, 1881-82. The Peabody fund gave to South Carolina \$5,375 for the year 1881-82; \$2,150 of this went to the public schools; \$1,400 for teachers' institutes; \$1,575 for scholarships at Hampton (colored), and at Nashville (white); and \$250 for Claflin University (colored). The record of the State teachers' normals for 1882 fills 24 pages in the final report of Superintendent Thompson, fairly crowded with readable matter for the benefit of teachers and the enlightenment of the people. Especially was this true of the long and elaborate report of Superintendent Newell, who was never more in his element than at the head of one of the summer schools in Virginia, North Carolina, or South Carolina. Dr. E. S. Joynes still holds the professorship of English literature in the South Carolina College. The colored normal at Columbia was again under the direction of Prof. H. P. Montgomery.

In his farewell to his official position, Superintendent Thompson writes: "Popular education in South Carolina is no longer an experiment. The results already accomplished have amply repaid the State for all the money expended in the effort to establish a system of public schools. A public school system can not be created; it must be the result of watchful care, of persistent trial, and of perpetual labor. Now that the foundation has been laid, the friends of popular education may look forward with confidence to the steady development of a school system which through all the coming years shall extend its manifold blessings to the people of South Carolina."

A fair estimate of the condition of popular education in the year 1882 will justify the claim of the retiring superintendent, Hon. Hugh S. Thompson. In 1882 the State had finally made up its mind to the constant and increasing support of common schools for both races and all classes, by a State tax levied by the counties and expended within county limits for the elementary schools of both races, by legislation for the imposing of a local tax to support graded schools with high school annex in a number of villages and cities, and by the annual support of institutions for white and colored students and also of teachers' institutes for both races. The teaching force had been so improved by the reformed examinations, reliable payment of salaries, and attendance upon the three important State institutes, that in many cities and villages could have been found a group of teachers filled with enthusiasm, eager to profit by every opportunity, and assuming logical leadership for the mass of their associates. South Carolina is the only State that even for a time has included a colored seminary as a department of the State University while under the conduct of its own people, and no southern city has done more in proportion to its means for the schooling of the colored race than Charleston. But still, in 1882, the free graded school, forming the department of secondary instruction, had made but little progress in South Carolina. Outside the half a dozen larger cities of the Commonwealth the public schools of the towns and villages were under the control of the county authorities, and little better in quality and length of school term than in the rural districts. Even the city of Columbia, the capital, early in 1882, had voted against the establishment of a system of graded common schools, although two years later it adopted and organized a system that placed the State capital alongside of Charleston as an educational center. This movement increased steadily, so that during the following ten years the majority of the considerable towns in the State were supporting a graded system of schools. The university at Columbia had not yet risen to the height of its former position, although receiving the income of the agricultural and mechanical college land-grant fund. As an accomplished fact, the steps taken toward higher education in South Carolina in 1880-1890 were but the beginning of a movement which was bound to bring forth fruit at a later period. As an illustration of

what a generation of educational leaders could do under conditions the most discouraging, the status of education at this point was a spectacle full of hope and cheer. The people of the State of both races had fixed their minds and hearts on the enjoyment of the blessings that attend universal education, industrial, social, and religious, and no side-tracking of any great interest by a trifling political policy and no aggression from any class of its people could permanently hope to hold back its Commonwealth from this great agency of American civilization.

During the next four years, 1882-1886, the educational interests of the State of South Carolina were cared for by Mr. Asbury Coward, who succeeded Superintendent Thompson, who was promoted to the office of governor. Mr. Coward, with commendable modesty, declares in the opening sentences of his first report that "on taking up the duties of the office of State superintendent of education I entered upon an unknown field. The school law, the precedents established under it, and the details of its working had to be studied by me for the first time, and this work has hindered to a considerable extent the freedom of action and feeling of confidence necessary to the successful discharge of all the functions of the office." But this disclaimer simply tells the people that their new superintendent of education was not a lawyer or a politician. He was an educator of established reputation in the northwestern portion of the State—the Piedmont country—from which almost every educational leader for the previous half century had come; the manager of a well-known classical and academical high school, an eloquent public speaker, and a thorough, devoted, and untiring worker in the cause of universal education.

He does not hesitate to disclaim all merit for the success of the schools during the opening year of his service, but lauds "the wise and energetic administration of my distinguished predecessor." It was, indeed, a great blessing, not only to the incoming superintendent, but to the State, that the governor's chair for four years was filled by the man who had practically established the system of public schools, and was responsible for what was best in it, and had put on record the history of its development. The record of the administration of Superintendent Coward during the four years from 1883 to 1887 bears witness to the conflict between the warring elements of progress and reaction. The more hopeful signs were the increasing determination of the people of the State to support an effective system of public education for their children, to develop the system along the lines of the American common school in every grade from the plantation primary to the State university, and to continue to extend to the children of the freedmen the same opportunities offered to the white children. In 1882-83 the enrollment in all the schools was 173,095, a gain of 27,121 over the previous year. The school sessions had been held an average of four months. The cost per pupil was less than \$2.50. The increase in the number of schools was 86; in schoolhouses, 104, and in the number of teachers, 81.

The superintendent rightly declares that where the schools have proved a failure it has been due "to the illiberality and narrow prejudices of the community or to the incapacity and want of loyalty on the part of the officials who have assumed the charge of the local administration of the school law." The superintendent recommends that the teachers' course in the College of South Carolina be further developed, and that in Claffin College the normal department be given State aid, in order to better meet the growing demand for professional training for the teachers of both races. The State board of examiners adopted the excellent works, *Methods of Teaching*, by John Swett, superintendent of the public schools of California and city superintendent of San Francisco, and the *Art of School Management*, by Dr. J. Baldwin, the veteran of nor-

mal school instruction in the three States of Indiana, Missouri, and Texas, as books of reference in the preparation of teachers.

There had been a decided increase of students in the three institutions grouped together as the State University, namely, the College of South Carolina at Columbia, the Claflin College for colored students at Orangeburg, and the State Military Academy at Charleston. Meanwhile the attendance on the other colleges of the State had not diminished. The superintendent was impressed by the commencement at the Claflin College for colored youth, and believed that institution to be a great agency in the "best and truest development of the colored citizens of the State." In 1882-83 the chief support of the two colleges of the State University was derived directly from the fund of 1862, specially appropriated by the General Government for the maintenance of agricultural and mechanical colleges.

Recommendations of the superintendent included the standard suggestions concerning some way of increasing the funds, lengthening the school term, appointing rather than electing the State superintendent and commissioners, increasing their terms of service to four years, and giving better compensation to the county officials. The county institute is commended as bringing the benefits of the State institute within reach of a larger number of teachers. A limitation of the school age to 6 to 16, with a provision for compulsory school attendance for at least twenty-four months, is suggested. The University of South Carolina in its three institutions was well cared for by a board of trustees, consisting of the governor, State superintendent of education, three judges of the supreme court, the two chairmen of the committees on education in the general assembly, two gentlemen representing the State Agricultural and Mechanical Association and the State Grange of the Patrons of Husbandry, respectively, and seven elected members. The president of the South Carolina College was Mr. John M. McBryde, one of the most competent educators among the coming men of the South. Col. J. P. Thomas was superintendent of the Military Academy.

Notwithstanding the adverse circumstances of short crops, a severe winter, and an unusual financial stringency, added to a revival of the opposition to the common school waked up by the discussion of national aid to education, Superintendent Coward is happy in 1883-84 to announce "that the steady progress of the work has been in nowise checked. The great heart of the Commonwealth has adopted the public schools; the great movement has acquired too much momentum to be stopped by threadbare theories or caviling criticisms. The spirit of progress has lifted the living present above the prejudices of the past." There had been the unusual increase of 12,524 pupils, with an increase of average attendance of 3,118, in number of teachers of 190, and in number of schools of 213, with a four months' average length of school term. "A spirit of professional pride has been developed in a large number of teachers," shown by "improved methods of teaching and discipline." The symmetry of the school law was being endangered by the practice of granting privileges of various sorts to local schools, through special acts of the legislature, and the superintendent puts in the plea for a general law authorizing local taxation for graded schools under proper limitations.

In his third report, the seventeenth of the annual series, for 1885, Superintendent Coward enumerates the special features of what he regards a general condition of unchecked progress. These are, a higher standard for teachers, better schoolhouses built, a truer appreciation of the importance of school work, more regular and punctual school attendance, and an increasing resolution to supplement the school fund by voluntary contributions or local taxation for a longer term, and all that makes for improvement. It is unnecessary to refer

to the continued protest of the highest executive official of public education against the chronic weakness from the instability of official life in the county school commissioners, and against their selection by immediate popular election. Such evils as were ingrafted into the constitution and school laws of the State were certain in time to so impair the general usefulness of the entire system that a reactionary movement was at any time imminent. The superintendent speaks with encouragement of the increasing interest in the higher education, both in the State institutions and those under denominational and other control, and enters his protest against the separation of the State University from connection with the management of the common schools. This year the State board of examiners turned a new screw on the examination of teachers, requiring 80 per cent for a first-grade certificate, 70 for a second, 60 for a third, and not less than 40 in any one branch. The State institute for white teachers in 1883 was held in Charleston, with Mr. Henry P. Archer, afterwards city superintendent, as principal. Dr. F. Louis Soldan was a visiting lecturer. The veteran friend of common school education in the city, Hon. C. G. Memminger, Mayor Courtenay, and other well-known friends of the schools, were on hand with a cordial welcome. The important subject of manual training came to the front in this institute. Governor Thompson made an address, closing with the memorable words "The teachers of this country are the peace army of the Republic."

The legislature enacted that no persons under the age of 6 should be entitled to free education in the public schools. The superintendent asks for the privileges of the floor of the legislature during debate on measures introduced by himself. The general fact seems to be that, outside of half a dozen of the leading cities and towns of the State, the rural schools were going on with little hope of immediate help for the chronic disability of short terms, crowded enrollment, and the other common hindrances to education in the open country. Although the University of South Carolina did not report in detail to the State superintendent, the general facts concerning its condition were published in his report. The annual cost of education for a student of the South Carolina College was \$149, and 184 students were in attendance. Claflin University reports gain in the educational outfit, an attendance of 405. The venerable Doctor Cooke, under whose able and devoted administration this useful institution had risen to be one of the best of its sort in the South, had retired, and Rev. L. M. Duntun had been elected to the presidency. Gen. George D. Johnson had succeeded Colonel Thomas as the superintendent of the military academy at Charleston.

In his closing report for 1886 Superintendent Coward speaks of a steady progress in the common schools of the State since the year 1876. The average attendance had risen from 101,816 in 1882 to 126,696 in 1886; the teaching force from 3,413 to 3,835; the number of schools from 3,183 to 3,660. During the year 1886 there had been 183,966 enrolled, of whom 126,696, nearly 69 per cent, were in average daily attendance for three and one-half months. The number and quality of schoolhouses was increasing. There were 34 special school districts empowered to levy a supplemental tax in 1886, against 14 in 1882, and the desire for the establishment of the well-organized graded school system was widening and deepening year by year. Since the inauguration of this movement in the city of Columbia 10 of the leading towns of the State had followed in the establishment of graded schools, and this meant much more than better schools for the places thus supplied—namely, the consequent growth from the acquisition of good people from the surrounding country districts. Each well-conducted graded school in South Carolina became a new educational center and object lesson for the county. A reduction of the taxable property in the State to the

extent of \$5,500,000 caused a loss of \$11,000 to the common school income of the year.

The legislature of 1885 had made several amendments to the school laws. The first was a provision that no examination for a teacher's certificate should be required of any person who could present a diploma from any chartered college or university certifying to his proficiency in the common school studies. The second had struck out the provision for a yearly examination, making every certificate good for two years, to be renewed at the discretion of a local board of examiners with or without examination. Thirdly, the examiners were to serve without compensation. The superintendent protests that the second of these changes, if it remains in force, "will soon destroy the patient efforts of the State board of examiners during the last ten years to build up the professional pride and increase the efficiency of the teachers;" and this, "in connection with the third change, will eventually destroy the most important functions of the county boards." The provision enforced on the College of South Carolina and the South Carolina Military Academy, that every student enjoying a free scholarship should be required to teach in the common schools of the county from which he was appointed two years after graduation, could not be carried into effect, as the appointment of teachers rested solely with the district trustees. The manager of the State institutes for teachers returned to the original practice of placing this important service under the control of a distinguished educator from abroad, and this year invited Dr. A. J. Rickoff, the former superintendent of schools in Cleveland, Ohio, and in Yonkers, N. Y., but at that time engaged in the work of making schoolbooks, who, with his accomplished wife, Mrs. Rebecca D. Rickoff, also Dr. L. R. Klemm, of Hamilton, Ohio, and Prof. C. L. Floyd, of Atlanta, Ga., and others, had conducted this meeting. A daily attendance of 250 to 300 and a large additional evening audience was the result. The colored institute was held at Columbia, under the presidency of Mr. M. A. Warren, of Connecticut, remembered as the principal of the State normal school during the period of reconstruction. The State superintendent made special visits this year to 16 counties, giving addresses in 11. The Peabody education fund appropriated \$11,500 to the State.

In bidding farewell to his office in 1886 Superintendent Coward bears testimony to the aid of the board of examiners in constant support of his efforts. The attendance of the College of South Carolina had risen to 213, and a new department of mechanics had been added to its industrial branch. Claffin reports 410 pupils, with an average attendance of 303, all but 3 counties in the State being represented. The retirement of Superintendent Coward, after his four years' term, left the common schools well along in the progressive stage of success. After sixteen years, the first eight under the reconstruction policy, the system had been practically adopted by the people of the State, and in the face of a faulty school law, legislative indifference, the jealousies and prejudices of locality, and the incessant though every year less aggressive opposition of its enemies, it had made creditable progress. Indeed, Charleston, for a city of its population, in 1887 could not be exceeded as a center of education by any city in the Southern Atlantic or Gulf States. The city of Columbia had entered on a very successful career of graded school instruction, so good that it speedily absorbed all the leading private schools for white girls in the city. At an early period the girls' high school was associated with a free training school for teachers, which was later incorporated by the legislature, receiving the first appropriation in the State for the higher schooling of white girls, whereby two pupils from each county were entitled to free instruction. In due time this school opened up to the normal and industrial college for white girls, established at Rock Hill, in the northwestern portion of the State, one of the most impor-

tant institutions for the education of girls in the Southern States, and still under the presidency of President D. B. Johnson.

During the twelve years following the retirement of Col. Asbury Coward from the office of State superintendent of education, held by him for four years, the position of superintendent was occupied by only two men, Mr. James H. Rice, from 1887 to 1890, and Mr. W. D. Mayfield, from 1891 to 1898. The office of governor was held from 1887 to 1890 by Hon. John Peter Richardson, from 1890 to 1894 by Hon. B. R. Tilman, from 1894 until 1896 by Hon. John Gary Evans, and from 1896 until 1898 by Hon. William H. Ellerbe. The closing decade of the century was ushered in by a radical political change in the ex-Confederate States, especially the southwestern and those of the Atlantic coast, in which South Carolina was the most conspicuous leader. Until the year 1860 the political power of all the slave States had been to a great extent monopolized and all public offices held by the representatives of the slaveholding class. It was inevitable that not only was the possession of the vast property of these Commonwealths in the hands largely of this class, but here was also located the aggregated supremacy in education, and in social, ecclesiastical, and administrative ability. But although this formidable body of people had been greatly depleted by the war and their property almost annihilated by the abolition of slavery, yet until 1890, for almost fifteen years after the complete restoration of political autonomy to the reconstructed States in 1876, the younger generation of this class, trained in the armies and in the affections of the Confederate soldiery, were retained in the administration of State and national offices. There are no very reliable statistics concerning the per cent of illiteracy among the nonslaveholding classes previous to the outbreak of the civil war, but from various indirect sources of information and the assertions of the representatives of the general educational public in all these States, many of whom were among the most eminent public characters of the South, it must have been very large. From 1870, the practical beginning of the new public school movement in the 11 ex-Confederate States, educational initiative and administration were in the hands of the class that had always been distinguished by superior cultivation. It was only too apparent after 1865 that the American common school system was the only practical method of recruiting even the educational ranks of the families who were superior before the war. Few of the colleges of these States had resumed their functions and but few of the impoverished families had the means to educate their children in the higher class of schools. The educated women of many of the most distinguished families were also compelled to resort to some means of self-support, and the common schools opened at once a large number of positions to them. Outside the great effort for the schooling of the colored freedmen, assisted by the foremost people of the North and the nation, the negro really owed all the public schooling that was given him to the old master class; and as long as this class held the reins of popular affairs he was reasonably sure of this agency for his elevation to responsible citizenship.

During the twenty-five years from the close of the war to 1890 there had been a great upward movement also among the masses of the white southern people. The four years spent in the war had been to the soldiery of the Confederate armies a great university, carrying more than half a million of the young men farther from home than their fathers had ever wandered and introducing them to all the 16 States of the South. At the close of the war they were, in fact, the chief gainers from the great change in the social organization of the Commonwealth. Large quantities of good land came into the market, and the number of farmers was doubled, even in some instances quadrupled, especially in the States of the Southwest. The children of the old soldiers were able during these years to gain at least the elements of learning even

from the country district school of three months in the year, and many of these youth pushed upward and soon crowded the halls of the old-time seminaries and colleges. It was inevitable that the time would soon come when the natural ambition of the people, always largely turned upon public life, should be manifested by the superior youth of this class coming forward with their claim to the enjoyment of political opportunities and functions. In South Carolina the up-country people for half a century had regarded themselves as deprived of their rightful places in the government of the State, the distinction wrought by the property qualifications for representation in the general assembly throwing the power into the hands, practically, of a small minority of people on the seaboard. So it was only to be expected that in South Carolina, the most intense and revolutionary of the 16 Southern States, this movement would begin. Virginia was only saved from it by the secession of the entire western part of the State at the outbreak of the war and its organization into a new Commonwealth, which at once inaugurated a movement for a complete common school system in 1865. In South Carolina, practically, in 1890, the movement had been inaugurated under the leadership of the Farmers' Grange, but really as an independent undertaking by the majority of the white people, to help themselves to the emoluments and opportunities of public life. Chief among the leaders of this movement was Mr. B. R. Tillman, a man of large endowed native ability and great power of leadership of such a constituency.

Already during the four years of office of State Superintendent James H. Rice, the successor of Supt. Asbury Coward, and one of the most devoted and indefatigable educators of the State, a question had come up which boded no good for the present administration. The son-in-law of John C. Calhoun, Mr. Clemson, still resided on the ancestral property in Oconee County, in the western portion of the State. The estate was not largely available, neither was it in good condition nor with valuable buildings, but such as it was its owner offered it to the State, with a considerable sum of money, for the establishment of an agricultural and mechanical school, supported by the Congressional land fund of 1862, on condition that his own terms of organization be accepted. In connection with this offer a lively debate came up in every educational circle. The University of South Carolina consisted of the old South Carolina College at Columbia, the military academy at Charleston, and the Claflin University for colored youth, named from the father of Governor Claflin, of Massachusetts. These three institutions were governed by the same board of trustees. The income from the agricultural and mechanical land fund was divided between the white and colored people; the portion for the former going to the South Carolina College, which, under the administration of President McBryde and an able faculty, had largely regained its old position and increased its capacity for usefulness. But it was not difficult to wake up a jealousy against this institution among the masses, who had little interest in such a college and were also not specially inclined to encourage the union of the white and colored institutions under one board of university trustees. The name of Calhoun was a spell to charm with, and the closing years of the administration of Superintendent Rice were troubled by this debate, that was only an overture to the general movement for a complete reorganization of the political life of the State.

It is not the purpose of this essay to discuss the merits or demerits of the remarkable movement which, after 1890, effected a change in the government of the State. The fact of this overturn of the master class in southern affairs, beginning in South Carolina and steadily capturing every Southern State, will appear in history as one of the inevitable results of the great civil war, and

undoubtedly as a great element in the development of these Commonwealths. From the year 1890 the history of popular education in the State of South Carolina will only be well understood in connection with the fact that the legislature was administered by the representatives of the new "third estate." Much of the present misunderstanding of southern affairs, educational, social, industrial, and political, is owing to the confused notion of this great reaction at the close of the first generation after the close of the civil war, which is fraught with results as important as the more violent and radical events of the war period.

According to the message of Governor Richardson in 1887, the public debt of South Carolina amounted to \$6,400,000, a portion of which, \$277,000, was of questionable character. By the constitution and law the entire debt was to be readjusted in 1893. The governor believed the State capable of entering the markets of the world and making a favorable loan at 4 or 4½ per cent interest. He referred to the subject of lands forfeited to the State for nonpayment of taxes, already to the large amount of 1,054,252 acres. The failure to pay taxes had added 100,155 acres to this vast domain during the past year. All previous efforts to arrest this deficiency by legislation only exaggerated the evil. In regard to the public schools the governor, evidently heartily in sympathy with public education, bears testimony to his predecessor, Governor Thompson, as "an educator as well as a statesman." He gives a favorable view of the progress of the school system. He urges "local taxation to supplement the school fund wherever the taxpayers of a community desire the establishment of schools of a higher grade, and liberal efforts should be made by the legislature to give greater facilities for the training of teachers in schools specially adapted to that end."

The nineteenth annual report of the State superintendent of education, the first of Supt. James H. Rice, reports the favorable condition of the common school interests of the State. The new superintending broom had swept clean. During the year the superintendent had visited every county of the State and addressed the people on the great question. He returns to his work convinced that the people "were more than ever interested." He endeavors to map out a policy by which the work can go on into a broader and better fulfillment. He suggests (1) that there should be a general statute for local taxation and that all school districts should be organized under it. (2) The law respecting the election of county school commissioners should be changed, taking this important office out of partisan politics. Every county commissioner should pass examination by the State board of examiners before assuming the duties of his office, and, failing to pass this test, the governor should appoint his successor. The salary should be raised to \$1,000, and his whole time should be given to educational work. (3) A State normal school should be established. The Winthrop Training School, in the city of Columbia, had already begun this work under the direction of Supt. D. B. Johnson and his able assistant, Miss Leonard, of the Bridgewater Normal School, Massachusetts. The board of county examiners should have their positions and salaries restored at once. (4) Institutes had been held in 10 counties, in 2 under the direction of Dr. L. R. Klemm, of Ohio. The agent of the Peabody fund had donated \$10,000 to the State in 1887, besides \$4,000 to Charleston in view of the ruin by the recent earthquake. Hon. William A. Courtenay, mayor of the city, had been appointed to a position of trustee of the Peabody educational fund.

The school population of South Carolina, as given by the United States census of 1880, was 281,664, of whom 191,189 were white and 180,475 colored. An increase of 100 during 1887 brings the number of public schools up to 3,760. The public schools of one county had eight months' session during the

year; 175,017 pupils had been enrolled in 1887, an increase of 8,949, with an average attendance of 126,696; 3,994 teachers were working at salaries of \$28.70 for men and \$25.19 for women; \$368,585 were paid to all. The average length of the schools was three and six-tenths months; the longest term in Charleston, seven and seven-tenths months, and the shortest in Horry, two months, where of the 86 schoolhouses 6 were log; 805 of the 3,445 in the State were of this construction, only 105 with inclosed grounds. The total amount for schools in 1886 was \$538,253.50, of which \$453,852.09 was collected during the year, the remainder being unexpended balances from previous years. The higher education not being under the direction of the State superintendent, only the condition of the ordinary schools was reported.

The history of the three remaining years of the administration of Superintendent Rice is virtually a repetition of his first report. During this period of three years of his administration we note the constant increase of enrollment (18,417 in 1888, 6,830 in 1889, 6,919 in 1890) and the increase in the number of public school-teachers, some 200 in 1890. In 1888 16 county normal institutes were reported, but in 1889 the superintendent reports that "for various reasons the institute work is not satisfactory." The local boards are allowed \$200 per annum for his purpose, but only in a few which have an advanced board of examiners have institutes been held, and in some no institute has ever been organized. He urges that the teachers should all be compelled to attend and each county support a summer school of instruction.

The popular disaffection was so great with the county commissioners elected by popular vote that the legislature passed a resolution to strike the words "school commissioner" from the constitution, but the people had not yet acted upon it. An important move was made in 1888 by the legislature in the establishment of a normal school for young men in the South Carolina University. Its head was Dr. E. E. Sheib, son of a Lutheran clergyman and schoolman of Baltimore, Md., educated abroad, and for several years the principal of the State Normal School at Natchitoches, La. As a conductor of summer schools he had made a favorable impression. The students in this school and in the Winthrop Training School for females were admitted to the lectures of both colleges and to the practice classes of the Winthrop School. The Winthrop School was praised by everybody. The oration at the commencement season in 1888 before it was by Mr. J. P. Kennedy Bryan, son of Judge Bryan, of Charleston, and one of the most promising of the young lawyers and publicists of the State.

The establishment of special graded schools by the legislature, supplemented by local taxation, had been going on for four years. Besides the general good word from the increasing efficiency of a class of rural schools there seems to be, in 1890, only a gradual improvement.

The closing report of Superintendent Rice in 1890 is not a cheerful document. Apart from the yearly statistics it covers but 4 pages of original matter, and much of this is by way of criticism of the situation. The public schools, he says in effect, need money. There are too many schools. The tendency to multiply schools has not been sufficiently guarded hitherto. Under the stress of political influence in every neighborhood schools have been sought and located without regard to the public good. There is a great demand for the right sort of teachers. Eighty-seven trained teachers have been sent out from the Winthrop Training School at Columbia during the four years of its existence, and it was the best public school in the State in 1890. Fifty State certificates admit as many girls from the different counties to free training in the Winthrop School. It is subsidized by the Peabody education fund and State appropriations, with buildings from the city of Columbia. The institute work demands very careful

consideration. The meager salaries and delayed payments of them in many cases do not enable the mass of rural teachers to attend. The school commissioners should have nothing to do with the control of the institutes. It is recommended that the whole business of the institutes be placed in the hands of the State superintendent; that a certain sum be given for this purpose by the State, and a committee of two or more persons be appointed to supervise county work and give support to the State institutes. Superintendent Rice declares: "It is idle to have our statute book filled with school laws and place it in the hands of a superintendent with no powers to act. He is overwhelmed with duties and his powers are infinitesimal." The total amount received for the public schools in 1890 was \$527,846.57, a few thousand dollars less than in 1887. There can be no doubt that under the able presidency of Doctor McBryde in the South Carolina College, Superintendent Johnson in the military college, President Dunton of Claflin University, and Supt. D. B. Johnson of the Winthrop School, these institutions were doing a more valuable work than at any time before in their history.

But the real problem—how to educate the 280,000 children and youth between 6 and 16 years of age, 180,000 of them colored—was not yet settled. The real difficulty was in the people of the State, who clung to their hereditary faith in the localization of all public affairs with an inevitable jealousy of anything like concentrated government for any community. The State superintendent was but a respectable figurehead, and only unusual ability, great devotion, and the physical constitution of a giant could enable him to perform the indefinite duties of his position. But, as has been said of a corresponding change in Virginia, the common schools had been found to be such a necessity to the people that no change, however revolutionary or radical, in partisan politics could seriously impair their usefulness, and the changes which were made, all in due time, seem to have worked for the advantage of the children.

The superintendent of the common schools in the new State administration, of which Mr. B. R. Tillman for ten years remained the most conspicuous figure, was Mr. W. D. Mayfield. Although younger and less known than any of his predecessors, his long administration of eight years was characterized by several of the most important developments of the educational life of the State. During these years, when party political agitation was stimulated almost to the verge of revolution by the most important change that had come upon the State since the close of the civil war, namely, the elevation of the old nonslaveholding white farmer class to the responsible position of administration in all public affairs, the agricultural and mechanical colleges for white and colored pupils were established through the partial absorption or dismemberment of the State university system. The university normal college for white girls was located at Rock Hill. The new constitution of 1895 took a forward step in raising the State tax for education to 3 mills on the dollar, and appropriated several other funds, especially the net income of the liquor dispensary system, to the same use. It also provided that until the fund in its distribution amounted to \$3 per capita on school enrollment the State might impose a further tax, and directed that no school should be kept for less than three months in the year. The amended school law provided virtually for a general system of local taxation in all districts for the establishment of graded schools, which opportunity was largely improved. Meanwhile additional power for efficient administration was conferred upon the State superintendent by requiring all the State institutions of the higher education and all the special graded schools to report directly to him. An arrangement was made by which the children could obtain school books at cost prices by purchase through the county commissioner from a somewhat extended list prepared by the State board of exam-

iners. The county institutes were gradually improved, while a modified type of State institute was still preserved. The private and denominational colleges were encouraged to establish chairs of pedagogy by the provision that their normal diplomas should entitle a graduate to full authority to teach. A chair of normal instruction was established, with a class of some 30 students, in the South Carolina College, which admitted women to all its opportunities. The beneficiary graduates of the South Carolina Military Academy at Charleston were held strictly to their obligation to teach two years, and their appointment was urged upon the city boards and local trustees.

The enrollment in the public schools in 1898, the closing year of Superintendent Mayfield's administration, reached 275,889. At that time there were 550,000 persons of school age—6 to 21—a majority of 150,000 colored. During the eight years the enrollment had increased 72,749, an average of 9,000 each year, the increase of the closing year being 17,706, the largest in the history of the schools. During these years 1,148 schoolhouses had been built at a cost of \$234,743.58, although the trustees of the rural schools were forced to use many inferior private houses. Many buildings owned by the State were declared by the superintendent "a disgrace to the cause, and but few are wholly sufficient and properly equipped." The lack could only be supplied by more money, and the local trustees were said to have generally done their best with what was to be had.

The financial state of the system had greatly improved, as was confirmed by the steady increase of school expenditure. In 1898 the aggregate was \$754,741.50, and the average length of the school term was, for the white 4.82, and for the colored 4.20 months. Several of the counties had come to a cash basis and others were approaching it. But the superintendent declares that "the school fund is too small to provide proper schools and continue them a sufficient length of time. The demand of the people is for better schools and longer terms, and this can not be secured to them without more money." In the opinion of the superintendent the common school teachers "will compare favorably with the teachers of any other Southern State." All the counties save two had supported institutes for teachers in 1898. The agent for the Peabody fund continued to show great interest in the State, and furnished \$2,000 for Winthrop College, \$700 for Claflin University, \$1,500 for teachers' institutes, and \$850 for the colored schools of Charleston.

In the closing words of his official report Superintendent Mayfield writes: "The period 1890-1898 has been one of unusual political agitation and of great financial embarrassment. Our people have encountered hardships and difficulties that the educational department has had to share with them. Yet a comparison of the statistics of public education to-day with the conditions existing in 1890, when the reform faction came into office, would show results in the highest degree gratifying and encouraging to the friends of public education."

That there was a growing interest in popular education was shown by a hasty record of school legislation during this period. As early as 1888 the county treasurers were required by law to carry forward the unexpended funds of each year to the subsequent year, instead of turning them into the general county treasurer, as had probably been often done. In the last year the sum of \$77,250 refunded by the United States Government to the State for the use and injury of the Charleston citadel buildings of the military college was appropriated, \$57,000 to rebuilding and \$20,000 covered into the State treasury for general use. In the same year separate districts, not only in cities, villages, and chartered towns, but in the open country, were authorized to establish graded schools by local taxation, voted by all who paid a tax on \$100, to the extent of 2 mills on the dollar.

In 1888 Mr. Thomas G. Clemson, the son-in-law of John C. Calhoun, living on the ancestral estate at Oconee County, near the State border line, died and left a will with a bequest of his estate of 840 acres, Fort Hill plantation, and of his other property, real and personal, with a considerable sum additional, to establish an agricultural college on the place. In 1888-89 the State accepted the bequest, although the gift was accompanied with great commotion in the educational public, especially for its evident relation to the future agitation concerning the State university. The most important of the conditions attached to the bequest was that 7 of the 13 trustees were to be of the donor's own appointment, and they were known to be persons influential in the new political movement. The remainder were to be chosen by the legislature for terms of four years. The studies were to be liberal, but all centered on industrial training. The number of professors to be elected by the trustees was limited to ten. Each student was to be charged \$40 tuition, although there was to be a provision for indigent boys. All future bequests from any quarter were to be received without compromising any of these arrangements. The sum of \$3,000 was voted for the preparation of plans for the buildings. Governor Richardson at first refused to sign the bill in 1888, but it became a law in 1889. The legislature of 1889 appropriated one-half the income of the general land fund of the agricultural and mechanical college to Clemson College, to be under the direction of four of the six trustees elected by the legislature. This grant consumed one-half the sum of \$191,800, namely, \$95,900, the portion of the fund applied to the education of the whites, invested at 6 per cent. The other half went to Claflin University for colored youth. In addition there was voted to the new institution the amount of \$15,000 from the Hatch fund and \$10,000 from the tax on fertilizers, taken from the State board of agriculture, which was abolished and all its duties and emoluments turned over to the Clemson College.

Until the completion of the necessary buildings of the new Clemson College the mechanical department of the South Carolina University was kept in motion by an appropriation of \$4,000 and a general grant of \$43,000; \$5,000 was bestowed on the Claflin College department of the university, representing an investment of some \$80,000 reserved for the colored portion from the Congressional educational land fund; \$20,000 went to the military academy, recently reopened in the citadel, partially rebuilt from the destruction of war, and \$8,000 was given to the Winthrop Training School.

But with the opening of Clemson College came the predicted dismantling of the University of South Carolina, including the South Carolina College, the Claflin University, and the South Carolina Military Academy under the same board of trustees. By act of the legislature of 1890 the South Carolina College and Claflin were left under the board of trustees of the university, while the military academy was placed under the domination of its own board of visitors. The governor, chief justice of the supreme court, State superintendent of education, the chairmen of the two legislative committees on education, and nine additional members chosen for six years by the general assembly were appointed as trustees of the university. A majority of the number was necessary to elect the president and faculty, to expel a student, or to elect a board of visitors. All matters connected with the agricultural experiment station were to be turned over to Clemson College. In 1891 the school and course of study were reorganized in South Carolina College, limited to "theoretical science, law, literature, and the classics." Everything connected with the agricultural department was transferred to Clemson, and at a later date everything relating to the mechanical interest followed. "No atheist or infidel could be appointed president," and one of the professors was to fill the office of chaplain. The State

board of agriculture was also abolished and its work handed over to the new agricultural and mechanical college.

In 1891 a law was passed, which was afterwards amended, to compel the more effectual collection of the poll tax, which was appropriated to the educational fund of the State. The year 1893 was made memorable in the annals of the later educational growth of the State by the organization of the normal and industrial State college for white girls. It was first named the South Carolina Industrial and Winthrop Normal College, but was later known as the Winthrop Normal School. This school, the flower of the public school life of the State, owed its existence (having been established in 1886 as the Winthrop Training School) to the superintendent of the graded school system of the city of Columbia, Mr. D. B. Johnson, who secured an appropriation by personal application to Hon. Robert C. Winthrop, president of the board of the Peabody education fund, for a local training school department in the Columbia graded schools for the teachers of that system. Mr. Johnson was a native of Tennessee, one of the number of young men who owed to the influence of Prof. E. S. Joy nes, of the University of Tennessee, at Knoxville, the direction which made them first known as superintendents of the graded schools of several cities in North Carolina, and afterwards sent them to important positions in other Southern States. He was called from Newbern, N. C., to the establishment of the first system of graded common school instruction at the capital city of the State of South Carolina, which work he accomplished with such success that it captured the better side of the community and declared its superintendent as one of the most successful of the younger educators of the South. In due time the legislature was persuaded to make the first appropriation ever voted for the higher education of young women in South Carolina in a provision for a class of beneficiary students, two girls from each county, a movement which lifted the local Winthrop Training School to a position of general usefulness. The friends of the school ascribe its further elevation to the influence of Governor Tillman, who, in the face of a prolonged and bitter political opposition, did certainly, in his plans for the building of the Clemson Agricultural and Mechanical College, and later for the Winthrop Normal College for Girls, and, partially, in the support of the State union with Claflin University, for the first time in the history of South Carolina make it possible for any large number of the sons and daughters of the white masses to aspire to a proper college education.

In 1893 this school received its final organization. The governor, State superintendent of education, 7 additional trustees elected by the legislature for six years, and 2 afterwards added as local trustees were appointed for its management. The objects aimed at in the establishment of the institution were named, as (1) the training of teachers; (2) expert instruction in all industrial pursuits suitable for the sex; (3) each girl should be compelled to take one industrial art. The tuition was fixed at \$40 per year, which was remitted to indigent students. The graduates of the normal department were entitled to first-grade State certificates as teachers in the common schools. Each graduate was supposed to cost the State \$150 per year. The county of Anderson was authorized by the legislature to bond itself to the extent of \$100,000 to secure the location of the school, but for some reason this movement failed, and the enterprising little city of Rock Hill, York County, in the northwestern hill country, made a donation of land, material, and money which fixed the location there. This school was in its internal features of organization largely a copy of the girls' normal college of Mississippi, which had been established several years before, and has been followed by the foundation of similar institutions in North Carolina, Georgia, South Carolina, and Alabama. The original idea was the giving to the masses of white young women an opportunity for a

complete education—academic, collegiate, professional, and industrial. By its fundamental idea of industrial training it first introduced the daughters of the poorer classes of the white people of South Carolina to the great field of expert industries and professional teaching, that for twenty-five years had been open to the colored youth of the South through the great schools established by northern churches at the close of the civil war. President Johnson was thus able to direct the new stream of influence in the college to the training of a new generation of common school teachers. He organized the normal and industrial departments in mutual proportions, and made them the most attractive features of the school. The teachers were not elected at the suggestion of politicians or social dignitaries, but were called for personal ability from all sections of the Union; and under them the pupils were thus brought in connection with every section of the country, and were trained in the genuine American ideal of American culture, character, and aspiration.

In 1891 the law provided that the public school fund should be apportioned in proportion to school attendance, and authorized the county boards of examiners to apportion \$200 a year for teachers' institutes, 13 counties being exempt from the latter provision. The State board of examiners was authorized to enlarge the common school curriculum at its own discretion, a necessity brought on by the rapid increase of special graded school districts. In 1893 these districts were permitted to impose a tax of 4 mills on the dollar, and the liberty to do this was extended to the extent of making it a general law.

The same legislature granted to the graduates of the Winthrop Normal and South Carolina colleges and the military academy what was at first a privilege extended to the graduates of the Peabody Normal School at Nashville, namely, that of receiving a perpetual State certificate to teach, and this privilege was later extended to all the colleges of the State which supported a chair of pedagogy. An historical commission was instituted by the legislature in 1894, consisting of the secretary of state and five additional members appointed by the governor, to collect materials for a history of South Carolina. In 1895 the final act of dismemberment of the University of South Carolina was taken, in the rupture of the union of the State with Claflin University and the establishment of the Colored Normal, Industrial, Agricultural, and Mechanical College of South Carolina. This institution was established at Orangeburg, alongside of Claflin University; but although containing a large number of students it seems never to have detracted from the continued success of Claflin. In 1897 text-books were offered at cost for the entire State, provided by the State board of examiners. The special graded schools of the State were ordered to report to the State superintendent of education.

In 1898 the 3d of November was named for the observance of Arbor Day in all the schools. Several of the academies and colleges of the State established a course of manual training, as approved by the State board of education, and their graduates were entitled to a first-grade teacher's certificate. Despite the opposition of many of the friends of public education, awakened by some careless and mischievous attempts at legislation, the constitutional convention of 1895 brought forth a somewhat improved indorsement of the common school system. It provided for a State superintendent of education, elected for two years by popular vote, and a State board consisting of the governor, State superintendent, and seven additional members, appointed by the general assembly. It authorized a State school tax of 3 mills on the dollar; provided still for the election of the county commissioners, superintendent, and three trustees for rural schools; continued the appropriation of the poll tax to the school fund; and provided that for three years, unless the income of the State fund amounted to \$3 per capita of the school enrollment, there should be assessed,

at the discretion of the State authorities, an extra tax to supply the deficiency. After 1899 a tax was to be laid on the people of the State sufficient to provide for lifting up the school system to the position indicated.

The history of the eight years' administration of Superintendent Mayfield, beginning with 1891, the twenty-third year of the existence of the common school system in the State of South Carolina, is chiefly interesting for its demonstration of the fact that while the masses of the people of both races were fully determined to hold on to the schooling they had gained and obtain as much in the way of improvement as was possible, there was still a formidable element in opposition to the entire policy of "educating other people's children." But during this period the general assembly found itself between "the upper and the nether millstone." The real tax-paying contingent of the community were not enthusiastic over the new complication of public affairs and formed a strong conservative force opposed to any increase of taxation. The masses below had no special objection to following their leaders in the appropriating of large sums of money to establish schools like Clemson, Winthrop, and the new college for the colored youth, provided they were not drawn upon to pay the bills and all the advantages were practically to be enjoyed by themselves.

The "first call" of the new superintendent of the State system, who as a teacher had been in the actual service of the common schools, was the "last call." "There can be no better schools in the State without money." His second call was also unheeded—that the present mode of electing the county commissioners of schools by the means of political partisanship had produced a state of affairs in which "the utter inferiority and impotence so frequently found in this office is lamentable." It would be better to appoint a sufficient number of assistant superintendents of education, with living salaries, to do the work in the entire State. One such assistant for each Congressional district, or perhaps a lesser number, could do much more and far better work than that done by the commissioners. But this reform could not be secured as long as the mass of voters, who now held the State in their hands, insisted on placing their own favorite leaders in county affairs in this important position. The utter lack of "power to act" in the State superintendent made his entire representations of little effect on the general assembly, which had always deprived him of a suitable office in which to keep his records and do his work. He was confined to a small room without shelving or casing, with no space to arrange the material in his charge.

The number of students in the South Carolina College was 182. The radical change in the organization of the university had lost to it the valuable services of President McBryde and several of the professors, and Prof. James Woodrow had been appointed as president.

The enrollment of pupils in the schools in 1891 was 209,557, an increase from 1880 of 55.41 per cent, and 18.20 per cent of the entire population (1,151,149); there had been an average term of 3.51 months, while most of the cities and towns had voted for the imposition of an extra tax to establish graded schools, generally from eight to ten months. The legislature had appropriated \$150 a year to each of the 34 counties of the State. In 1886 ex-Superintendent Asbury Coward had been elected president of the military academy, with ten professors and a four years' course of study. Each county was entitled to a number of beneficiary candidates, supported at public expense, 5 for Charleston and 1 for several of the smaller counties. The beneficiary candidates were pledged to teach in the schools of the State for two years after graduation. There were 34 graduates in 1892. A list of colleges, academies, high schools, and graded schools of the State aided by private funds was provided in the report of this year.

In 1893 the number of school children enrolled numbered 223,150, an increase of 13,591 over the previous year. The report of the superintendent opens by the renewed demand for more money, but the legislature provided only \$483,170.55, \$30,000 less than for the previous year.

After the retirement of Superintendent Mayfield, the schools were under the administration of Mr. John J. McMahan, who held the office from the year 1899 until 1903. This gentleman entered upon his term of service of four years in 1899 under more favorable auspices than any of his predecessors. Four years before, in 1895, a constitutional convention representing the new order of public affairs had to some extent improved the public school facilities of the State. The new constitution imposed a 3-mill tax on property, the proceeds within each county to be apportioned among the districts according to the number of pupils in the schools of each. It further provided that each district be authorized to levy an additional tax for the support of its own local schools. The act of the general assembly passed under this constitution provided that this extra levy should not exceed 4 mills. But these provisions, the new superintendent declares, although they compel or encourage local contributions to local schools, "fail to guarantee a general system of well-supported schools—wealth is so unevenly distributed, some districts and some counties are so much poorer than others and, moreover, voluntary actions are so uncertain and irregular. The distinct tendency of our times is for wealth to center in towns and cities. While, therefore, the town, while levying upon itself an additional tax of but 2 mills, may provide an admirable and complete system of schools, the country district with the maximum levy of 4 mills additional may be unable to raise a fund adequate to the support of a poorly paid teacher for even six months." Superintendent McMahan opens his first report by a disparagement of what is called statistical information, which he declares is "of little practical value. The average length of session for the State and for each county, although it shows that the period of instruction is much too short, by no means shows the extent of this deficiency. The statistics of each class of schools should be given separately." He enumerates cases in the statistical information hitherto presented as unreliable, owing to the neglect of local officials and the confusing of accounts. "There is a great and growing demand for better schools. The increase of the school funds by the constitutional convention has operated to awaken a keener sense of the need of still greater improvement. A general State tax for school purposes, which some years ago would not have been thought of, is not improbable in the near future, unless the liquor business pays to the schools more than it has paid thus far. The best proof of interest in education is the willingness to bear an extra local burden. The number of extra levies made this year is known to be remarkable. Many districts have failed only by a few votes of making this levy, but are assured of future success. That town is an exception that has not for some years borne an extra tax and maintained an efficient system of graded schools, and this year's record has considerably reduced the number of exceptions. The town graded schools are an evidence of local educational awakening and an assurance for better schools for the surrounding country. A large number of country districts in different counties have been maintaining, through extra levies, flourishing schools. We have 3,000 white teachers and 2,000 negro teachers in this State, many of them poorly fitted for their work, ill-informed even in the subjects which they attempt to teach. The normal colleges can not in a generation supply a considerable proportion of teachers to supplant those now in the schools. At the rate of 50 a year from Winthrop, if all become teachers for life, thirty years would not supply more than half the number of white teachers now being employed. The graduates of all the colleges of the State,

if all should become teachers, could not supply the needed number. Poor teachers, where tolerated, drive out good teachers." An appropriation of \$5,000 from the surplus dispensary profits was used for the support of 40 white and 8 negro teachers.

The superintendent urges the claims of industrial training for the benefit especially of the negro population, also for the white race, showing that outside of Clemson College and perhaps one graded school there are now no industrial schools for white boys in the Commonwealth. The chief duty of the State superintendent of education is with the country schools. The one need of these schools is efficient teachers; back of this lies the need of sufficient money and of wise management and supervision. The vital points are thus stated: (1) Want of local taxable values, as the corporations and the rich men for the most part make their homes in towns. (2) Want of sufficient enrollment in a given area to insure a good school. (3) Want of efficient business management, and skilled, close supervision of teachers and schools. The backbone of the school fund is the constitutional county 3-mill tax, which is distributed to rich and to poor districts alike in proportion to the number of children enrolled in the schools of the respective districts during the preceding year. Among other provisions, the new constitution declares that besides the poll tax and the 3-mill tax the general assembly shall cause to be levied annually on all the taxable property of the State such a tax in addition as may be necessary to keep the schools open throughout the State for such length of time in each scholastic year as the general assembly may prescribe; it also dedicates to the cause of education all the net income to be derived by the State from the sale or the license for the sale of all spirituous liquors, and only when this fund is sufficient to meet and equalize the deficiencies does the constitution relieve the general assembly of the duty of levying supplementary taxes. But the legislature has never levied these taxes, and schools are supported within county limits only to the extent of the dispensary profits that have been distributed, and there is a tendency to divert the liquor profits from the school to ordinary county expenses.

The criticism of the superintendent on supervision is even more thorough and searching than in other respects. The salaries of county superintendents, outside of one county, range from \$600 to nothing, the usual salary being \$300 or \$400. Of course, the superintendent must give most of his time to his own private business. A table is presented showing the results of this arrangement in different counties. The superintendent says, "It is a penny-wise and pound-foolish policy if the best management is not provided for such large and extensive operations as are involved in the expenditure of public school funds. It is not by this policy that railroads, cotton mills, and other enterprises are operated successfully. The other county officers are paid more than twice the salary of the superintendent of education, who alone is treated as of little or of no value to the county. The county supervisor, who has general care of the poorhouse and the chain gang, is usually paid twice as much as the superintendent of education, who has charge of the children and who handles more money than the supervisor. Besides his executive duties, the county superintendent has a boundless field for work as an expert teacher and trainer of teachers, and by kindly private criticism and suggestion aiding the teachers. Through his efficient work the whole body of teachers will gradually be raised to a higher plane, and every child will receive a better education." He recommends that the salary of each county superintendent be raised to \$1,000.

"During the past three years the State has enjoyed a phenomenal industrial development. The increased taxable values in newly built railroads, cotton mills, lumber mills, and other corporate enterprises will divide with the former property of the State the so-called burden of taxation for higher education, and will take up

cheerfully the burden of the 3-mill tax for lower education." He complains that the State superintendent of education has no office room, except at the courtesy of the committee on agriculture. The office is not supplied with suitable cases or furniture, even if proper rooms were assigned. The clerical force of the office is entirely inadequate. The State superintendent of education should spend most of his time in work among the schools, the teachers, and the school officials of the different counties.

In his second report for the year 1900 the superintendent returns to his work of criticism on the defects of the public school system. He "is gratified at the evidences of awakening and improvement in educational matters. The teachers have continued to show keen appreciation of the opportunities afforded them by the summer schools. The National Education Association met in Charleston from July 7 to 13, and exerted a quickening influence upon the educational thought and aspirations of the State. The summer school has become one of the fixed institutions of the State, appreciated and cherished. The South Carolina Kindergarten Association, originating in Charleston, is directing attention to this method of instruction, and a department has been established in Winthrop College." The various colleges and collegiate institutes in the State have begun the work of the present scholastic year with unprecedented attendance. The capacity of each is taxed to the utmost. But with all these evidences of increasing interest, the superintendent puts his finger on the radical defect of the system. He says, "It is a misnomer to say that we have a system of public schools. In the actual working of the great majority of the schools in this State there is no system, no orderly organization. Each county supports its own schools with practically no help from the State as a whole. Each district has as poor schools as its people will tolerate, and in some districts anything will be tolerated. Each teacher works along in her own way, whatever that may be, almost uninfluenced by the existence of any other school or school authority. Isolation reigns. This is not inspiring or stimulating." Although he deprecates any sudden attempt at the concentration of a school system so hostile to the training and political and civil traditions of the State, yet he says: "I am convinced that our educational system has certain fatal defects, and that all efforts at improvement must fail of substantial results until by the necessary legislation these defects are removed and the system is put on a sound and safe basis for growth and development." In detail he takes up the different departments of the system. "The State superintendent," he says, "is compelled to confine himself to clerical duties, when he should be abroad and dealing with the public schools, as the law demands visiting every county in the State for the purpose of inspecting the schools, awakening interest, and diffusing by public addresses and personal communication any knowledge of existing defects. The county superintendent of education should be a skilled professional superintendent or inspector. But this can not be while the salary is so inadequate, the tenure short or uncertain, and the choice by popular election. The average salary is \$423.75; the usual salary \$300 or \$400. There is a change in the official every two or four years, and his holding the office is dependent upon the political ring of the county. The law prescribes no qualification for the office of county superintendent, and only in a few counties is there a sentiment that he must have been a teacher. In many counties it is not expected that he shall be an educated man. In a few he is utterly incompetent. The important duties that belong to the office are rendered almost impossible of performance by his dependence on political influence for holding and retaining the position."

"The county superintendent of education should be employed by a county board of education, which should have ample power over the schools of the county and should be selected in such a way as to guard against sudden changes in its

personnel and policy. It should be composed of five representative progressive citizens, with terms of from one to five years and finally five years each. The salary of the county superintendent should be \$1,000 in every county, and in several of the counties \$1,500. The teachers neglect to make a final report to the trustees or the county superintendent, hence school statistics are only imperfectly presented. Many schoolhouses are built at considerable expense with no regard to ventilation and light. There is need of an expert school man traveling over the county acquainted with all the conditions. Schoolhouses are frequently unnecessarily located. The division of counties into suitable school districts is indefinitely neglected. The certification of teachers in some counties contemplates the qualification to teach, and in others it means nothing. The school trustees, occupied with their private business, without special information on school management and without time or thought to study the question, frequently take but a superficial interest in the work of their schools and fail to lend the teachers needed aid and encouragement simply because they don't know. Very few teachers will follow a course of study prepared by the State board of education without the stimulus of the visits of a capable inspector or superintendent. Many teachers pay no attention whatever to published instructions. We should look to the establishment of county high schools in the near future." Remarks on instruction, discipline, management, weeding out incompetent teachers, and teacher training, are in the same direction. "The great need of the schools is more money, although without better organization more money will be of little use. The legislature at its last session came near appropriating \$100,000 additional for the public schools, but the movement was defeated. In 1899 the liquor dispensary paid to the schools \$130,000, only a part of the earnings which by law belonged to the schools. The State's share of the net profits in that year amounted to \$193,689.49. In 1899 the dispensary owed the school fund \$514,379.95. The tendency of the legislature is to appropriate these earnings to the ordinary purposes of government in the counties." The superintendent urges on the legislature an appropriation of \$200,000 to be apportioned to the schools. The taxable property of the State is nearly \$179,000,000, so that $1\frac{1}{2}$ mills would raise over \$200,000. "The legislature have heretofore been against the principle of State aid to common school education. They appropriate to everything but schools for the people. The unequal distribution of wealth renders it impossible that common schools should prevail through the State unless the legislature comes to the aid of weak sections. The wealth of the State should educate. An appropriation of \$200,000, when divided, would be an inconsiderable aid to districts with teachers at \$75 to \$160 a year, no more than the wages of a negro plowboy, with schoolhouses only fit to give pneumonia to teachers and children. If the news should go forth that South Carolina's legislature had made an appropriation insuring to every child at least a six months' school, she would in one month be the best advertised State in the Union. We have reached the point where any further advance of our school system must be of the country schools. The work of colleges and town schools has prepared the way. The masses of the people, who recognize the county schools as the only college for them, begin to feel and assert their rights. No power can much longer postpone the day of better common schools." The superintendent calls for (1) an assistant, and recommends the enactment of a law insuring the employment of an expert superintendent for each county, with a salary of \$1,000 to \$1,500, and responsibility not to the general electorate, but to a board of five members, of whom only one shall be subject to displacement every year; (2) the levy of an additional tax on all the property of the State sufficient to raise \$200,000, this sum to be distributed in accordance with the command of the constitution; (3) the provision by the legislature of a liberal sys-

tem of public schools and the bringing up of the schools in weak sections to a general standard; (4) the creation of the position of assistant State superintendent of education at a salary of \$1,500.

In his report for 1901, covering the operations of the school system from July, 1900, to July, 1901, the following statistics appear: The average annual salaries for teachers were \$188.91 for white and \$80.30 for negroes; in Charleston County the annual average salary was \$504.78 for white and \$196.22 for colored. The average length of school term was, for white, 21.17 weeks; for negroes, 14.12 weeks. The enrollment was 127,230 white and 157,976 colored, with 94,548 average attendance for white and 113,566 for negroes. The total school population of the State in 1900 was 560,773, of whom 50 per cent were enrolled and 37 per cent in average attendance. The superintendent declares: "Allowing for students in colleges and private schools, and for all boys and girls over 16 years of age, we still should be alarmed at the number of children who don't attend school." He urges a compulsory education law which should require every child between the ages of 8 and 12 to attend school at least 12 weeks in the year. Forty-four summer schools for teachers were held, namely, for white, 1 State and 36 county schools; for negroes, 1 State and 6 local schools. The enrollment of whites for 1891 was 1,729. "Nearly every white teacher in the State has attended a summer school for teachers." Manual training, school physics, drawing, and kindergarten methods were among the subjects treated in these schools. The venerable Doctor Carlisle, formerly president of Wofford College, gave in six lectures personal reminiscences of men and conditions in South Carolina before the war. Dr. William H. B. Burnham, of Clark University, lectured on pedagogics. An effort was made to induce the county superintendents to attend these schools. A fatal weakness in the administrative system is the appointment of local trustees by the county boards of education every two years, with a probability of an entire change of policy. The superintendent returns again to the discussion of the county boards of education and the county superintendency, repeating his recommendations that the county superintendents should be appointed by the county boards. "By the law of 1900 schoolbooks are sold to the children at the lowest price at which the books are sold anywhere outside of the State to dealers at wholesale." Several important meetings of teachers of different departments of the school system have been held during the year. The recommendations of the superintendent are: (1) the school fund should be increased; (2) immediate provision should be made that teachers' salaries shall in every district be paid, without discount; (3) terms of members of boards of school trustees should expire at different times; (4) county boards of education should be composed of five members elected by the people, the term of only one member to expire in any one year; (5) members of school and college boards should not by reason of such service be disqualified to hold office; (6) the office of county superintendent of education as now established should be abolished. The county boards should be charged with the responsibility of employing a county superintendent as supervisor of schools for the county, and fixing his salary. (7) The salaries of the present county superintendents should be increased. (8) The law in regard to teachers' certificates should be changed. (9) An appropriation of \$200 should be made to enable the State superintendent to secure the services of an architect in designing plans for suitable schoolhouses for the country and for small towns. (10) Normal scholarships for teachers, two from each county, of the value of \$150 each, should be provided in the normal department of the South Carolina College. (11) School districts should be authorized to vote upon themselves bonds for the erection of suitable school-

houses. (12) A law should be enacted to require, with compulsory penalties, that all children between the ages of 8 and 12 years should attend school each year. (13) The compensation for clerical services and necessary assistants in the office of the State superintendent of education should be \$1,200 for the chief clerk and \$600 for the stenographer and typewriter.

With this picture of the system of public education supported by the State of South Carolina this essay closes. It is unnecessary to multiply the details of the different departments. It is, however, evident, that at the close of the century the State of South Carolina had encountered the same problem which the State of Massachusetts was called to face during the decade previous to the year 1900. These two States, so different in some respects and so unlike from the beginning in other tendencies, had resembled each other in their stubborn attachment to the idea of local school government. In both these States, in Massachusetts from the beginning and in South Carolina from the beginning of its present system of public instruction, the emphasis of administration and operation has been on the school district. Horace Mann declared that the law incorporating the single school district in the New England town was the most mischievous ever placed on the statute book relating to education. Only within the past twenty years has the State of Massachusetts been thoroughly awakened to the fact that under the policy of supporting public schools chiefly by local taxation, with little help from the State, an increasing number of its 350 towns were being left in a condition really less favorable to educational success than half a century ago. By the great effort of a succession of State superintendents and almost a campaign from town to town, the State is now attempting, without imposing a considerable levy for general distribution, to assist the smaller towns by special appropriations and to place them under a vigorous local supervision. All this is comparatively easy in a State with the great wealth of Massachusetts, whose people for two hundred and seventy-five years have been trained in the policy of universal education. In South Carolina, with its various disadvantages of sparseness of population, preponderance of colored citizens, and only the recent dawn of financial prosperity and progress, the problem is far more difficult. But since the administration of Superintendent Thompson, who organized the system from 1876 to 1880, no superintendent has done more valuable service than Mr. John J. McMahan, by placing before the legislature and people the actual condition resulting from the same policy, and predicting the consequences of persistence in the isolated method of educating the people.

But here, as in every Southern State, the interesting fact has been developed that whatever may be the changes of political policy, through whatever periodical excitements the mass of voting population may be carried, and however unpropitious and discouraging may be occasional phases of legislation, yet the mass of the people has set its heart on the education of its whole population for good American citizenship. With this present determination and the steady growth in this direction the ancient Commonwealth of South Carolina has no reason for despondency, but may look forward to the gradual reform of the weak side of her educational system and to the greatly desired harmony of races and classes in a united American citizenship.

GEORGIA.

The State of Georgia may honestly claim the honor of being the only one among the 15 Southern States that began its life as a colony by the prohibition of negro slavery and the sale of intoxicating liquors, and that signalized the

opening of its career as a State of the American Union by an educational policy which, if persisted in, would have realized the ideal of Thomas Jefferson in the establishment of the people's common school. How this great and financially able and progressive Southern State should have found itself in 1850 with 25 per cent of its 213,903 white adults unable to read and write; in 1860 with 18 per cent in the same condition and practically with no organized common school system on the ground; in 1890, after twenty years of common schools, the fifth in the Union from the bottom in general illiteracy (38 per cent), with 400,000 of its 600,000 colored people (67 per cent) in mental darkness; in 1898 engaged in a hand-to-hand conflict in its legislature to prevent the reduction of half its appropriation of \$1,000,000 for public education, and only succeeding in a compromise securing a reduction of \$250,000; is a problem which has always been in controversy between the friends and enemies of the common schools in the State.

The details of the rise and slow growth of the common school idea in Georgia up to the period of the outbreak of the civil war are set forth in Chapter VII of the Report of the United States Commissioner of Education for 1899-1900, relating to the history of education in the different Southern States from the year 1830 until the outbreak of the war. An attempt, after the close of the civil war, to establish and support a system of common schools for the white population of Georgia only lasted for two years and left the State indebted to the teachers and officials of the system in the sum of \$300,000. In the seventeen years from 1872, the real beginning of the present system of common schools, until 1889 it is estimated that the State expended \$6,070,038 for rural and \$1,686,007 for city and village schools, the grand total being \$8,756,023. For the forty-three years previous to 1860 it is estimated that the entire expenditure for poor white people's schooling was \$1,290,000, in annual contributions such as \$18,556, \$12,000, and at the last \$40,000 for the entire tuition of children of this sort. In short, since the establishment of its constitution, the State of Georgia had expended for common schools inside of \$10,046,023 by 1889. From 1865 to 1889 it is estimated that the expenditure for colored common schools, 250,000 children, was \$2,800,000. Until 1860 the education of the white people of Georgia, save the indigent poor, who received three years' tuition at public expense, and the few university students, was virtually in the hands of the different churches of the State. The colleges and academies (and numbers of the latter assumed the college title) were almost exclusively denominational. Their presidents and professors were clergymen, and almost the entire management was in the hands of church members. This type of education gave the tone largely to the entire educational life and spirit of the people, and was more than any other influence responsible for the educational policy of the Commonwealth; it was also responsible for the fact that up to 1860 the same policy as reflected in the legislature left this great old Commonwealth at the foot of the ladder of white illiteracy.

In the year 1856, after a visit of Dr. Henry Barnard, of Connecticut, to the South in the interest of public schools, a movement was made for the establishment of a system of education, open alike to rich and poor, supported by public tax, State and local, and administered by district, county, and State commissioners. The plan met with favor in the legislature, as did a similar plan in 1854, but failed to secure the needed vote. In connection with this agitation the Hon. A. H. Stiles, speaker of the house, descended from the chair and took the floor with this impassioned appeal:

Let us by the passage of this bill inaugurate a system of common schools in Georgia. In the name and in behalf of 150,000 Georgians between 5 and 20 years of age who are growing up in ignorance of the duties and relations of

civilized life I demand it. In the name of 42,000 of my countrymen over the age of 20 years who are daily hurrying to the grave without being able to read for themselves the way to eternal life; in the name and in behalf of the whole State, which we proudly call the Empire State of the South, I demand it.

"Most of the States of the South," writes Dr. Gustavus J. Orr, "in adopting new constitutions under the reconstruction acts incorporated into the fundamental law the public school policy." Georgia was no exception to the rule. In 1868, while the State was yet under the reconstruction government, the new constitution included in the most complete manner the American idea of a scheme of universal education under the direction of the whole people as represented in their political organization. This provision reads as follows;

ARTICLE VI.—*Education.*

SECTION 1. The general assembly, at its first session after the adoption of this constitution, shall provide a thorough system of general education, to be forever free to all children of the State, the expense of which shall be provided for by taxation or otherwise.

SEC. 2. The office of State school commissioner is hereby created. He shall be appointed by the governor, with the consent of the senate, and shall hold his office for the same term as the governor. The general assembly shall provide for the said commissioner a competent salary and necessary clerks. He shall keep his office at the seat of government.

SEC. 3. The poll tax allowed by this constitution, any educational fund now belonging to this State, except the endowment of any debt due to the State university, or that may hereafter be obtained in any way, a special tax on shows and exhibitions and on the sale of spirituous and malt liquors, which the general assembly is hereby authorized to assess, and the proceeds from the commutation for militia service, are hereby set apart and devoted to the support of common schools. And if the provisions herein made shall at any time prove insufficient the general assembly shall have power to levy such general tax upon the property of the State as may be necessary for the support of said school system. And there shall be established, as soon as practicable, one or more common schools in each school district in this State.

But it was two years later that the legislature, still under the same political administration, Governor Bullock being chief executive, passed the first free school law ever recorded in the statute books of Georgia. This law of 1870 owed its inception, and largely its enactment, to the persistent labors of the first State teachers' association. This body, not large in numbers, but strong in weight of character and influential advocacy of the common school, held a meeting at the city of Atlanta, just rising from its destruction, in August, 1869. A committee chosen to report upon a school system for the State reported to a subsequent meeting at the city of Macon. This committee was composed of Gustavus J. Orr; Bernard Mallon, the city superintendent of the public schools of Savannah; John M. Bonnell, president of the Wesleyan Female College; Martin V. Calvin, a representative to the legislature from Richmond County and a rising writer and speaker on popular education, and David W. Lewis, of the North Georgia Agricultural College at Dahlonega, and by that position a representative of the State university system of the Commonwealth.

A paper prepared by Mr. Calvin advocated not only a system of common schools for both races, but graded and State normal schools. In this he had been anticipated by Hon. William H. Stiles in 1856. Mr. Calvin still "lingered shivering on the brink" of the new departure, the education of the freedmen, and suggested that the colored race should be schooled by the appropriation of their own poll tax and other taxes and such sums as the people might see fit to donate. This paper was placed in the hands of the committee, and its ideas were largely indorsed in the report written by Doctor Orr. The report ran the gauntlet of another committee, on which we find the names of President LeRoy Broun, Superintendent Mallon, and others. Thus edited it was

brought before the State Teachers' Association, assembled at Macon several months later, which appointed a committee to put it in the form of a bill and urge it upon the legislature. A political agitation in that body suspended operations for a time, but eventually the results of this action of the teachers' association appeared in the public school act of 1870. By this law the governor, attorney-general, secretary of state, and State school commissioner were declared the Georgia State board of education and the State commissioner the chief executive official. This body was to hold all public school funds, select school text-books, and annually report to the legislature. The State commissioner was to be appointed by the governor, with the consent of the senate. The commissioner, as the representative of the board, was authorized to prepare rules for the organization and management of the public schools, to visit the different senatorial districts in the interest of education, to distribute all school funds on the basis of the school population, and to report to the legislature. His salary was fixed at \$2,500 and traveling and other official expenses, and \$1,200 was voted for the salary of one clerk.

A county board of education, composed of one member from each military district and one for each ward of a city and incorporated town, was to be elected by popular vote in each county, to hold office for two years from January 1, 1871. It was authorized to divide the county into school districts and take the general charge over city and graded schools. Each school should be composed of 30 pupils. A system of ambulatory schools was suggested, by which the same teachers could "keep school" in a region surrounding their central schoolhouse. The board was the custodian of all school property. It could establish graded schools, teaching subjects in addition to the common school curriculum—orthography, reading, writing, arithmetic, English grammar, and geography—and could examine candidates for teachers according to a programme made out by the State commissioner of education. The compensation of each member was \$3 per day. The trustees of the school districts were to be elected by the people after three years. They could hire teachers from the certified list, visit schools, supervise the building, hiring, and furnishing of schoolhouses, and exercise the usual functions of local school trustees. The white and colored children were to be educated in separate buildings, but afforded the same facilities for instruction. The trustees were required to report to the county commissioners. All school property was exempt from taxation. Thirty-five pupils was the minimum number which warranted opening a school. All graded and high schools should be free of tuition. Evening schools should be established for youths above 14 years of age. The schools should remain in session at least three months in the year, a district failing in this respect not receiving State aid.

The support of the system was to come from (1) a poll tax of \$1 upon each voter; (2) the tax on shows and exhibitions; (3) a tax levied on the sales of liquors; (4) the tax for exemption from military service; (5) all State educational funds not belonging to the university; (6) one-half the net earnings of the Western and Atlantic Railroad, owned and operated by the State.

Under the authority of this act of October 13, 1870, an organization was effected. Gen. J. H. Lewis was appointed school commissioner by Governor Bullock and schools opened generally. But the first essay, as usual, was a leap in the dark. At the time of the opening of the schools there was not more than \$75,000 of school money in the treasury of the State. An act of July 28, 1870, had opened the door of the treasury to drafts on the school fund. To secure the indebtedness to the school fund arising from the drafts made upon it under this act, a deposit of bonds of the State amounting to \$268,000 was made August 6, 1870, nearly a year before the opening of the schools; no other deposit

was made. The fund was nearly exhausted before a single school was opened, by the favorite expedient of diverting the school funds to other purposes and the failure to collect the poll tax of 1868, 1869, 1870. Strange as it may seem, the teachers and school officials of the counties were left in entire ignorance of the impecuniosity of the State. An act of the legislature attempted to meet this emergency. But the result was that, on the appointment of Dr. Gustavus J. Orr as school commissioner, in 1872, there was due to the teachers and school officials the formidable sum of \$300,000.

Meanwhile another turn of the wheel of political organization had occurred which finally relieved the State of the domination of the reconstruction experiment and vested the complete administration of public affairs in its own people. The new governor, James M. Smith, appointed Dr. Gustavus J. Orr, already known as the practical author of the school law of 1870, as State school commissioner, a position which he held until his death on December 13, 1887, a period of fifteen years. His first act was an attempt to ascertain the actual condition of affairs after the general wreck of the attempt in 1870-71. It was extremely difficult to ascertain how much was actually due the teachers and officials, from the irregular manner of doing business in the premises. The commissioner advised the suspension of another effort until the facts could be ascertained, and meanwhile urged the State to provide for the payment of the first obligations due to its citizens, not only as a debt fairly due, but as the condition that the people would have faith in the stability of any future system of public school administration. In 1872 this course was taken and the old school debt paid as far as its validity could be ascertained.

The school law of October 13, 1870, had been amended by an act approved January 19, 1872. An examination of this statute will reveal several vital amendments, whose influence has been largely accountable for much of the ill success in the rural school keeping of the State until a late day. It placed the selection of teachers in the hands of the county boards of education. It conferred on them the direction of the county in school matters. But most important of all, it placed the election of the county board of education, the real driving wheel of the entire machine, in the hands of the grand jury of the county. The county school commissioner, as usual, was the secretary of the board, which was to consist of five members to serve four years. The duties of the board were greatly restricted, it not being permitted to remain in session more than two days at a time, at a compensation of \$2 for each member. The actual power in the system was thus removed from the people and transferred to a body of gentlemen, the grand jury, supposed to be especially qualified by superiority in character and official position, but not necessarily interested in the cause of popular education or informed concerning the methods of conducting a system of common schools. The appointment of the county board would naturally be greatly influenced by personal, political, and local conditions.

The grand jury also was to be intrusted with the power of imposing a tax to bring the school session up to six months. Any city having 5,000 people could procure the passage of a special law providing for a system of schools supported by public taxation, separate from the general system, receiving also its quota of the State funds, with only the obligation of reporting to the State commissioner of education. By another provision of the law the entire system, as far as it related to the common rural schools, which included the vast majority of the children of the State, was practically changed from a common school of the American type to a combination school on the British pattern of 1867. For by this provision any school that was engaged in the work of elementary education could be subsidized by the State funds to teach the common school children for the time during which the funds would hold out. This was

in effect a return to the old system of poor schools, for the pupils of the private and district schools could create a local public opinion against common school attendance which would diminish the number entering and depending upon the public school and also discourage the people from any effort at taxation to increase the public funds. Whoever was finally responsible for this scheme must rightly bear the heavy responsibility of the slow progress of common schools among the masses of the rural people of both races in Georgia for the past thirty years.

The superintendent in his first report, made July 17, 1872, protests at once against the economy that appeared in the amended law of 1872, regarding it a well-understood plan for reducing the State superintendent of education to a clerk overworked by the routine demands of his office. He demands that the county board shall be made a tribunal for hearing and determining all matters of controversy in reference to the construction or administration of the school laws, with an appeal from it to the State commissioner and finally to the State board. He proposes a general law enabling a subdistrict to vote on the question of graded schools on the approbation of the county board. He also suggests that the county board should be authorized to build schoolhouses, either by voluntary labor or by a tax on the school district, leaving any taxpayer to work out his tax in the labor necessary for its construction. He finally announces the law of all successful school life; that any public school system must be supported mainly by local taxation levied by the voluntary acts of the people. He protests with great energy against the fatal permission by which any group of people in the open country could share the responsibility of establishing and supporting a common school system by subsidizing a denominational school. The first report of Superintendent Orr, in fact, covers the entire distinction between the ideal of common school education, as comprehended by one of the most broad-minded and progressive educators of Georgia, and a politico-educational policy, at every step dictated by a despotic leadership in public affairs.

At the request of one of the State senators a bill was drawn up by Doctor Orr to "perfect the public school system and to supersede existing school laws." This bill was introduced in due season, and became a law August 23, 1872. Many minor changes have since been made in this law, some of which were tried for a time and then repealed; others still stand. Some of these changes have been wise and salutary. Several determined efforts have been made from time to time by the opponents of the public schools to overturn the system, but on every occasion defenders have arisen who have battled for and secured its existence. The most signal triumph of its friends was when the constitution of 1877 placed in the fundamental law the provision that there should be "a thorough system of common schools."

Under the operations of the school law of 1870 a system of public schools had been attempted, under the direction of State Commissioner J. B. Lewis. In his report made October 1, 1871, he states "that no public money for the pay of teachers had been appropriated for want of a census of school population, but that the sum of \$432,282 was in the State treasury to the credit of the school fund." By the aid of Doctor Sears, of the Peabody education fund, good schools had been started in several of the leading cities in advance of the State system. Seven hundred and nineteen public white schools, with an attendance of 34,558 pupils, and 97 public colored schools, with an attendance of 5,208 pupils, were opened in the State and continued an average term of forty-six days during the first year. There were also 634 white private schools, with 3,021 pupils. Then came the financial catastrophe which found Superintendent Orr in official position in January, 1872. The State owed the teachers \$300,000. The school population, 6 to 18, was about 370,000. In 1872 there were no schools maintained by

the State, and the time was passed in clearing the field of the debris of the cyclone and laying a suitable foundation for coming work. The State board of education had determined that the State fund consisted of (1) all the poll tax; (2) the taxes on shows and exhibits and on spirituous liquors that had been levied since the year 1868; (3) the interest due the bonds issued under the act of December 2, 1858; (4) all dividends that had accrued on 186 shares of the capital stock of the Georgia Railroad not hitherto used for educational purposes, several shares having been set apart by the act of January 22, 1852. It was also decided that the question should be submitted to the general assembly whether there was not due the educational fund one-half the monthly payments made by the lessees of the Western and Atlantic Railroad, according to the statute of 1870.

The opening year of Superintendent Orr's administration was distracted by bitter contentions in the legislature concerning the appropriation of funds for the common schools. The result was that in 1872 he informs the county authorities that there is no safety in opening the public schools without hope of meeting the expense of their conduct. His advice was complied with.

In 1873 the new system was launched, with 1,379 white and 356 colored schools, including 76,157 pupils. The average length of the school term was sixty-six days; \$174,000 of the old debt was paid, and \$250,000 applied by the legislature for the support of public education. Meanwhile, under the gifts of the Peabody education fund, attempts had been made in several of the larger cities of the State to establish what were called normal schools. The city of Savannah led the way. The Chatham Academy dated from the year 1788, when it was established as one of the county seminaries subsidized by the State. It inherited the original foundations of Bethesda College, which was established by Whitefield through the aid of Lady Huntington, the great English benefactress of the early Methodist evangelists, the Wesleys and Whitefield. By 1810 a building was erected. In 1813 the academy was opened. Under varied fortunes this school had gone on, virtually a public school of the original Georgia type, until 1887, when, by an enlargement, it was converted into a spacious school building for the use of the public schools. The system was inaugurated in 1866 by special act of the school trustees. It was confined entirely to the use of white children. By a special act the authority of the school board was extended over the county of Chatham as well as the city of Savannah. In 1878 the superior court by an amended charter placed these schools in correspondence with the State system, by ordering that the education of the colored children from 6 to 18 should be placed under the direction of the city and county board. The superintendency of the schools at the time was in charge of Mr. Bernard Mallon, a gentleman from the State of Ohio, whose services during the opening years of the new educational dispensation in the two foremost cities of the State, Savannah and Atlanta, and subsequently in the State of Texas, were second to none.

On January 13, 1874, Mr. Gustavus J. Orr, first State school commissioner of Georgia, made his second report to Governor James M. Smith, the first to report progress in the reorganization of the schools. His predecessor, Lewis, had resigned after the fiasco of attempting to carry on a system of public education in a State containing one-fourth of a million of school population by the financial policy of "living on nothing a year." The real beginning of the common school was effected in 1873, and then began the herculean labors of this noble old Roman of southern educators, Doctor Orr, continued through fifteen years of exhausting service, from which this good man was relieved by the promotion of death, leaving his name as one of the most truly memorable of the long roll of able servants of the Empire State of the South. One of his previous

services to the State was running the sectional boundary line between Georgia and Florida, an enterprise that led him as an explorer through the mysterious wilderness indicated in the old-time school geographies as the Okefenokee Swamp. But certainly he found nowhere in the swamp land a "slough of despair" more deep and disheartening than in the effort to lead a people, only half persuaded, up from the sloughs of an illiteracy more dangerous than all the perils of all wild lands and wild beasts, to the plateau of a fairly educated Commonwealth.

There were two conditions favorable to the establishment of "a thorough system of common schools" afterwards spoken of in the constitution of the State. One was the already apparent determination of the masses of the people that the children should go to school. At one bound the enrollment leaped from 49,578 in 1871 to 83,677 in 1873. Doctor Orr was afterwards enabled to state, with satisfaction to himself, that in no southern State during the fifteen years of his administration had the school attendance gone on increasing without the exception of a single year, as in Georgia. In no year was the increase less than 4,000, and in all except two years it reached from 10,000 to 12,000, 14,000, 24,000, and in the closing year of his administration to 34,000. In 1887 there were 342,294 pupils enrolled and 226,200 in average attendance; the races vied with each other in their constant increase of interest; the white enrolled in that year 208,865 and the colored 133,429, the rate of increase varying little between the two. The other favorable condition, not mentioned in his report, was the commissioner himself. After a lapse of twenty years and the subsequent experience of the administration of the common school education in Georgia, it is possible to look all around this period and come to a fair estimate of this evidently critical period of the enterprise. No fair-minded student of American history will question the fact of the deplorable suffering in the wrecked institutions, waste of life, and general misery brought upon the South by the civil war and during the succeeding years of reconstruction. But it should be said that none of these conditions were such a hindrance to the true prosperity and glory of this great State as the persistent opposition of a portion of its people to the establishment of any practicable and efficient system of education for both races.

Doctor Orr was not responsible either for the constitutional provisions that left a door wide open for the legislative diversion of the common school funds by the subsidizing of private and denominational schools or for the organization itself, which changed the system from the American common school to a scheme of education by the grand jury. No American State has before or since seen fit to entrust its most fundamental interest, namely, the schooling of its children for good citizenship, to the good will of a body of 18 to 30 gentlemen whose names were drawn out from a box by a judge of a supreme court, and who, in addition to all their other important duties of watching the public order and administration of law, appointed the board of education which was the organizer of the entire machinery of public instruction in every county, a board making its own secretary the school commissioner, appointing local trustees, examining teachers, building schoolhouses, supervising everything below them, dividing the county into school districts, appropriating funds to the schools of both races, and making such final reports to the State board and commissioners as they were ordered to, doing nothing except by the approval of the grand jury which dictated to it, audited its accounts, and practically decided whether the people should be allowed to vote on the proposition to tax themselves for a 3-mill school levy. Of course no such permission was given during the administration of Superintendent Orr. At no time has the State fund sufficed to keep a good country school for more than two months in the year.

The legislature during the entire administration of Superintendent Orr was

in the hands of the political leaders who were responsible for forcing this imperfect arrangement upon the counties. This was the condition of affairs which environed the superintendent during the years when he occupied the chair of chief executive of the public school system of Georgia. His policy in the drawing up of the school law and in advancing the general educational interests had been reversed in these essential respects. The county organization had removed the elementary common schools entirely from the direction of the people, and opened wide the door by which the common school fund was diverted to perpetuate an antiquated system of instruction.

With good courage and plainness of speech Superintendent Orr, in the opening sections of his report for 1873, places before the legislature the important fact that the State was nominally and, as he believed, legally in debt to the school department to the amount of \$250,000, represented by bonds issued in 1859 and 1860 under an act of 1858, which pledged them to the education of the people. The accumulated interest up to October 13, 1873, was \$63,000. He renews the appeal of his first report, that the legislature shall secure the payment of the interest now due and of that to accrue in the future. He renews the appeal from year to year, until in 1876 the legislature replied by resolving to destroy the bonds, which action implied a sense of its moral obligation. The other appeal, to pay the debt to the teachers for their work in 1871, was more effective, and from year to year payment was made. Up to December 1, 1873, the "net amount collected from all sources" amounted to \$739,722.42; \$250,000 had been apportioned among the counties for the support of schools during the year 1873, and \$174,000 appropriated to the payment of the debt of \$300,000 due the teachers. In 1870 the population of Georgia was 1,184,109, of whom 418,553 over 10 years of age were unable to read, a little over 35 per cent of the population; the number over 10 unable to write was: White, 124,939; colored, 343,601, a total of 468,540. The number of children from 5 to 18 was 407,516. There were 2,432 teachers of all kinds in the schools of the State, of whom a large number had little connection with literary instruction.

The superintendent believes that \$250,000 would be sufficient from the State school fund. By adding the tax on spirituous liquors and a poll tax the annual fund would amount to about \$325,000, enough to keep the schools open nearly three months a year. To prolong the school term "our main reliance must be on local levies." The superintendent furnishes an excellent table showing the relative amount raised by local taxation for public schools in all the States to support his proposition. To this text he sticks through his entire administration. Again and again he proposed an act authorizing the levy of a 1-mill tax by the counties for the supplementing of the State funds, only to see this persistently ignored and defeated by the legislature. After an ineffectual attempt to carry such a provision in the revision of the school law of 1872, he issued a circular defining his policy: (1) He would authorize the county board of education to lay a tax; (2) the board should fix the per cent of the tax and submit it to the public vote; (3) this money should be held for elementary schools only; (4) if a school district wished for a high school it should be obliged to tax itself for it; (5) each school district should build its own school-houses, either by tax or labor; (6) counties keeping up their schools by supplementing the State fund from subscriptions by individual patrons of the school should be left to pursue this method as usual.

The commissioner states his opposition to the State policy of appropriating \$8,000 a year to the Atlanta University, a school established at Atlanta at the close of the war by the American Missionary Association, an organization of members of churches largely of the Congregational body in the North, for educational and missionary purposes of the ordinary evangelical pattern. A

convention of 75 county commissioners was held in the summer of 1873 by call of the State commissioner. This body, under the leadership of the commissioner, favored his policy of local taxation for schools. One serious defect in all the reports of Superintendent Orr was the omission of the practice inaugurated by Horace Mann, of Massachusetts, and followed by the majority of the State superintendents of education, namely, that of publishing every year extended extracts from the reports of the local school officials.

The remaining reports of Superintendent Orr, until his death in 1887, are little more than variations on the original theme of the first. Each of them is characterized by the omission of the reports of the 130 county school commissioners. Any valuable information concerning the character, qualifications, and salaries of the 3,600 to 6,000 teachers; the county and graded special school systems, which were the only vital spots in the entire movement and which kept it from serious damage by its opponents; the State institutions of the higher education, which were and still are the object of constant attack from the representatives of the southern denominational colleges and academies, and the numerous changes in the details of legislation, including two entire new general school laws and one constitutional amendment passed during this period—on all these important features of an annual communication to a State school board and legislature, and which are essential to a correct understanding of any educational situation, the commissioner's reports are silent, or only by incidental remarks let in the light on the general obscurity which shrouded the general condition. It is a fair question how far a legislature so destitute of information on most matters connected with the school keeping of the Commonwealth was really responsible for its own unwillingness to embark on new experiments in taxation or listen to the arguments, however cogent, and the appeals, however eloquent and pathetic, of its superintendent.

It was only in the closing year of Doctor Orr's administration that the legislature enacted that the county and special schools would continue their general habits of neglect of duty at the peril of losing their annual proportion of State money, and that private school teachers who turned their seminaries into public schools by the reception of the State funds should figure as public school teachers by submitting to the ordinary examinations. With this exception, the reports of Superintendent Orr are among the most valuable documents connected with the earlier period of the operations of the public school system in the South (1870 to 1885). They were models of accurate, plain, forcible, and often eloquent, composition. Their financial statements were singularly clear from obscurity. As specimens of official courage and persistence in the pursuit of a great public good, they were unanswerable. And considering the situation during these fifteen years—the enemy always at the gates of the legislature, again and again demanding the practical destruction of the new system by the abolition or the starving out of the county boards and the opposition to any independent authority; the outward pressure of the church and private school element, not only to monopolize the secondary and higher education of the State, but through the practice of subsidizing the private and denominational elementary schools assailing the foundations of the system—considering all this, it may be that Superintendent Orr achieved all that was possible to be done, certainly by a man so high minded as this fine specimen of the old-time Southern educator called to administer the new American system of common schools. Until the day of his death in every report Doctor Orr returned to the central consideration that the State funds, however augmented by annual additions from the liquor and other taxes, were inadequate to the support of country schools beyond two months, and only a local tax of 1 mill on the dollar levied by the county board of education could assure the support of the "thorough

system of common schools" promised in the constitution for three months. Nothing daunted by the persistent refusal to grant anything except a tax on liquors and fertilizers, the commissioner went on with the solid argument for a scheme of local taxation that would place \$1,000,000 in the hands of the school boards and assure six months of good school life. While the great schools for the colored race established by the North, fully a dozen in number and some of them with more elaborate facilities for the secondary and higher education than any supplied by the State, were sending forth an increasing number of colored youth, often thoroughly trained in the philosophy and methods of the new elementary education, at least qualified by a creditable degree of scholarship, to meet the demands for teachers in city and country, there was no concerted attempt made for the training of white teachers, especially for the rural districts. The small sum provided for a time by the Peabody and Slater funds only supplied the State with a few summer gatherings in the counties. Each was attended by some 500 of the 6,000 teachers, and those chiefly from the localities where they were held. During the last year of the administration of the commissioner an attempt was made to bring the Peabody Normal School from Nashville, Tenn., to Atlanta, a project which was earnestly advocated by the progressive friends of education in the State. The contemplation of this change was forced upon the Peabody trustees by the constant neglect of the legislature of Tennessee to provide for the enlargement of the institution. Doctor Stearns, the chancellor of the university, was interested in the scheme, as was Doctor Sears, who died at the critical moment of the arrangement. The plan fell through, although the city of Atlanta would have given it a hearty welcome and the school a generous outfit, and the legislature of Georgia passed a law advocating the establishment of a competent normal school. But the fatal obstacle was that, by the organization of the public school system of Georgia, which was an imitation of the original system of the board of regents of the University of New York, all schools receiving State aid were practically under the supervision of the board of regents of the State University at Athens.

Of one fact the commissioner was convinced, and that was the fact presented with so much force by Barnas Sears, the successor of Horace Mann as the second secretary of the Massachusetts board of education, namely, that a successful campaign of education must be conducted by the spoken word and the visitation of the superintendent of education to every portion of the State. Especially was this true of a State like Georgia from 1870 to 1885, lying prostrate under the great calamity of four years of a terrific civil war and ten years of a civic revolution, which was really a civil war under another name. The reports of the commissioner were undoubtedly not read by many of the members of the legislature. Doctor Orr stepped forward as an evangelist of the new time coming to the people. During the several years of his administration, besides the laborious duties of his poorly paid office, he performed a series of a dozen journeys, visiting positions of vital interest in the establishment and support of a "thorough system of common schools." He also prepared and circulated a series of essays, which were largely copied by the leading journals and officially repeated in the report of the year 1875.

During the third year of his administration the commissioner traversed the State as an educational missionary, appearing before the people. He visited nearly every county, and during the remainder of his term revisited them. He was given the use of the county court-houses, still the best places for meeting the people of the South during the sessions of the courts, and his meetings were presided over by the judges. His addresses were admirably adapted to the object in view, to present the cause of popular education in a way that it should

be appreciated, not only by the most intelligent, but especially by the people who most needed information on this vital interest of the Commonwealth. At a later period he continued this ministry by an invitation of the National Association of Teachers to meet at Atlanta. The invitation was accepted in the year 1881, at the twentieth annual meeting of this association. The attendance was exceptional, from all the States of the Union, and remarkable for the unanimity of its action and the general spirit of fellowship. The year 1881 was characterized by the first attempt to hold a State institute of teachers, and although the attendance was discouraging, the beginning was well made. Doctor Wickersham, State school superintendent of Pennsylvania, was recalled in a subsequent year to conduct a State institute of teachers at Atlanta, which was the first that was really successful in point of numbers and in which the city was especially represented. The national convention returned the compliment of Superintendent Orr by electing him president of the association for the ensuing year, with five gentlemen, representing as many States of the South, on the list of vice-presidents.

By 1876 the State of Georgia was spending \$291,319 and the counties \$142,727, a total of \$434,046 for common schools, besides the sum appropriated for the higher education, being at the rate of \$1.10 on a school population, \$2.42 on enrollment, and \$3.77 on average attendance. Doctor Sears, general agent of the Peabody education fund, furnished the means to enable the commissioner to make an educational tour of the State, covering eight months and 45 counties, the visits alternating with days of hard work in the office. In many of the more densely populated districts the entire white population could be furnished with graded schools at the same expense as the private schools, which contained only a limited number of pupils.

With the year 1877-78 begins the system of biennial reports of the State commissioner of education, as the legislature met only on alternate years. In the first of these reports, issued November 6, 1878, the commissioner says: "I have witnessed a great revolution in public sentiment concerning common school education. At the beginning of my first term it was almost universal for my friends to speak in despondent terms in reference to the prospect before me. For some time past I have been receiving letters of encouragement from all sorts of citizens; from men eminent for learning and ability, judges of our superior and supreme courts, prominent men in different professions, leading educators, and large numbers of the common people, white and colored." The efforts of the opposition directed to the weakening of the provision in the fundamental law were less violent and had not succeeded. Here we find the important declaration in the constitution: "There shall be a thorough system of common schools for the education of children in the elementary branches of an English education only, as nearly uniform as practicable, the expenses of which shall be provided for by taxation, or otherwise. The schools shall be free to all children of the State, but separate schools shall be provided for the white and colored races."

At this point comes in the beginning of the notable movement of national aid to education, especially with the view to the abolition of the perilous illiteracy of the Southern States, ranging from 1885 to 1890. The commissioner of Georgia was, from the first, heart and soul devoted to this movement. At the personal request of Hon. John Eaton, United States Commissioner of Education, Commissioner Orr attended a meeting of the superintendents of education at Washington in December, 1877. He returned to his work in Georgia "deeply touched by the liberality on the part of Northern men."

In 1880 the commissioner declares: "Our educational condition and the needs of our school system have not materially changed since my first biennial

report." The continual increase of school attendance, while the most flattering feature of the system, was also the cause of the greatest anxiety from the pressing need of educational funds. The commissioner declares that in no State of the Union has so much been accomplished with a sum so disproportionate to the needs, and presses it on the attention of the general assembly that "we must have a State school fund of at least \$900,000." He prepared a bill, which was presented to the legislature in 1879-80, but which failed of passage.

In 1881 the school enrollment was 244,197, an increase of 7,664 over the preceding year. The sum collected for the State fund was \$195,137.35. The poll tax amounted to \$168,539.97, there having been 70,000 polls not returned. The sum raised by counties and cities under local laws was \$134,855.96, making the grand total of \$498,533.28 raised and applied to common school instruction. To this must be added the appropriations for the university and other State institutions of a charitable and semidenominational character. The commissioner repeats his constant declaration that "everyone who reads these pages will be struck with the total inadequacy of the sums we are appropriating for the support of schools to the object to be accomplished." He lets in a side light on the situation by the remark that the returns of taxable property would show evidences of returning prosperity "but for a vicious system of making these returns, which fails, and which will always fail, to secure a just valuation of property." He preaches again a powerful and practical sermon to the fathers at the Capitol, although the response was denied until after the death of the great preacher, in 1888-89, when a levy of a general property tax, yielding \$165,000 for the year 1889 and \$330,000 for the year next ensuing, for the support of the common schools was ordered. The people of the great and prosperous State of Georgia have learned, as the years go on, to honor duly the memory of their pioneers of universal education—Mallon, Atticus, and Laura Haygood, Governor Joseph Brown, and the hundreds of devoted men "and noble women not a few"—who stood by the cause when it needed both defense and assault against its enemies. The returns of the school census taken by local officials proved to be so unreliable that the commissioner suggested the use of the records of the United States census for comparison and verification. The number of children of school age—5 to 18—was returned in 1881 as 507,861.

The 244,000 pupils of the schools in 1881 were taught by 6,128 teachers, 371 of whom were in cities and counties under local laws. A few hundred were college graduates; 5,000 of them might be safely described as "persons of limited education." "Only a few hundred of these pupils will or ought to enter college." The commissioner urges on the legislature the duty of establishing a State normal school, and reports that Doctor Curry, general agent of the Peabody fund, is ready to assist in the establishment. In 1883 the enrollment of the schools swelled to larger volume, 287,411, an increase of 30,979, with an average attendance of 188,371, an increase of 24,191. The commissioner declares that no other Southern State, so far as he is informed, can present such a record of a steady increase of attendance without any backward movement. The State school fund was increased, especially by the tax on fertilizers, to the sum of \$483,633.11, which, added to the expenditure in counties, gave \$613,647 as the total appropriation for the common schools of the State. The remarkable statement is made that in the handling of school funds amounting to \$3,705,206.07, during twelve years from 1872, only \$5,000 have been lost. Although there had been a gradual increase in the appropriations, still they had been "so nearly proportioned to the increase of school population that the per capita appropriation has been but little augmented." The call for a convention of southern educators to discuss the subject of national aid to education was signed by large numbers of the most distinguished public and professional and business men of the State, including

Governors Colquitt, Hill, Gordon, Brown, and Jackson, and a memorial was signed by the State superintendents of schools of 14 Southern States.

The most interesting portion of the report of Superintendent Orr for 1883-84 is an elaborate defense of the colored people of the State, in answer to the charge that they are being educated solely at the expense of the white people. There were 95,055 colored pupils in the schools of the State. By provision of the school laws colored men were practically excluded from membership on school boards, and the commissioner declares that this practice can not be allowed. The cities of Columbus, West Point, Atlanta, Savannah, Augusta, and Macon, besides three counties, had established graded schools from six to ten months in the year. Six teachers' institutes were held in 1883, with a gross attendance of 270. Doctor Curry regards the return as "disappointing." The commissioner himself supervised the work, visiting 20 places and giving 28 lectures during the year. In 1884 there were but 3 institutes, with 282 in attendance, which the commissioner supervised and in which he gave instruction.

Commissioner Orr in 1887 rendered his final account to the Commonwealth, for whose glory and honor he had toiled so devotedly during fifteen years. The gross sum received in 1886 for all schools, State and local, was \$715,771.57, and the school enrollment had risen to 209,184 out of a school population of 508,722. The superintendent urges that a tax of \$1 on average attendance would furnish \$210,000 and a month's additional schooling. He again urges that \$1,260,000 are required to keep the schools open six months in the year. He places before the legislature the alarming figures of the illiteracy of the State in 1888—one-third the entire people can not write their names—and now for the fifteenth time he pleads once more for a more generous support of public education. He contends that the people should be satisfied with nothing less than a six months' common school term, and that the State should make a further provision for the establishment of normal schools.

The death of Hon. Gustavus J. Orr, in 1887, was the fit close of the first movement of the State of Georgia to establish the American system of free public schooling for all classes of its citizens. The office of State superintendent was filled by the appointment of Mr. James S. Hook, whose administration extended from December 27, 1887, to January, 1891. The introduction of the first report of Hon. J. S. Hook, appointed as successor to Superintendent Orr by Governor John B. Gordon, was a fit personal tribute to his predecessor. "He died with his armor on, falling like a true and valiant soldier at his post. His was a life consecrated to noble and untiring efforts to advance the educational interests of Georgia. He left the bright impress of his noble work upon the public schools." The short period between the assumption of his office and his official report compelled the new superintendent, himself not a professional educator, but a judge of the courts, to confine himself to the results already achieved. The school statistics were essentially the same as in the last report of Superintendent Orr. The school enrollment had steadily grown during Doctor Orr's administration, in 1887 reaching the high figure of 342,294, an increase of 22,570 over 1886. The average attendance for the same year was 226,290. In 1887 the State fund from seven sources amounted to \$493,509.52. The sum received from counties and cities under local laws amounted to \$302,477.74, making a grand total of \$795,987.26, a per capita on school population of \$1.42, on enrollment of \$2.325, and on average attendance of \$3.517. The State fund, excluding the counties and cities under local laws, afforded 88 cents per capita of the school population. Doctor Orr had demonstrated that the sum of \$1,260,000 would be necessary to support schools of the type needed in the State system for six months in the year.

Besides this, there were 104 private high schools, in 47 counties, there being

no report from 90 counties. There were 718 private elementary schools, white and colored, with 27,468 pupils. The commissioner was able to report that "whatever the opposition to the common or public school system in the past may have been, the system may now be said to be well-nigh universally favored." Commissioner Hook enters upon the chronic question of the increase in the State school fund. He claims that the entire revenue of the State Western and Atlantic Railroad belongs to the schools. The State fund, if this were allowed, would then give a four months' school. He also raised the discussion concerning the school fund of 1858, consisting of State bonds to the value of \$350,000, payment of the interest on which was still lacking. Apart from these questionable matters he suggests a general law authorizing every district, city, and town to tax itself in addition to the State distribution, for a longer and better term, an educational "local-option law." The Georgia Teachers' Association held at Macon in 1888 is quoted in support of this suggestion.

The revised school law of 1887 was in some respects a new statute. (1) It made the State board of education consist of the governor, attorney-general, controller-general, secretary of state, and State commissioner of common schools, and constituted it a court of appeal from the decisions of the State commissioner, and his adviser. (2) Under this law the State commissioner was appointed by the governor and confirmed by the senate. He apportioned the State fund to the counties on the basis of the children between the ages of 6 and 18. His salary was \$2,000, with a clerk whose salary was \$1,200. (3) Every county of the State formed one school district. (4) The grand jury for each county appointed a board of education of 5 members for four years, any member of which might be suspended by the judge of the superior court of the county, on the address of two-thirds of the grand jury. The board of education elected its president, and its secretary was the county school commissioner. It was to meet once in three months, and receive no compensation, save exemption from jury, road, and military service. It was authorized to lay off the county into subdistricts for separate white and colored schools. It was authorized to build, hire, and furnish schoolhouses, select text-books (not excluding the Bible), certify teachers, and generally administer the school affairs of the county. (5) The county school commissioner, who was the working member of this board of officials, was elected by it for four years. He examined applicants for teachers' certificates, using questions drawn up by the State commissioner, and the board on his report gave certificates for one, two, and three years, while the State board could give a permanent certificate covering the entire Commonwealth. The commissioner was expected to visit each school once a term, and was the agent of the board in procuring furniture and supplies. His compensation was \$3 per day for each day of service, the board determining the maximum number of days to be occupied in his work. (6) All the common schools were free of tuition. (7) Manual labor and evening schools could be opened by the county boards under approval by the State board. (8) The failure of the county board to establish schools deprived the county of the State apportionment.

The State fund was derived from (1) a poll tax, (2) a special tax on all exhibitions, (3) tax on liquors, (4) income from State stock in the Georgia Railroad, and one-half the rental of the Western and Atlantic Railroad, (5) income from the inspection of fertilizers in connection with the agricultural department, with several minor sources of income, added to what the legislature might raise by a general property tax.

The arrangement by which any teacher conducting a private school might make a contract with the local school authorities for teaching the entire public school contingent, and receive per capita from the school board during the continuance of the public school term, was retained in the revised law. All

such teachers were to be licensed and make reports, as in the case of public school teachers. Any city of 2,000 people, or any county or town, could under act of the general assembly establish a public school system separate from the State system and draw its portion of the State fund. The commissioner declares that the law is "a very comprehensive and important enactment, covering the ground of common school education in Georgia," and one of his earliest circulars was devoted to an elaborate legal exposition of its provisions for the benefit of the local authorities. Fourteen students in the Peabody Normal College at Nashville were assigned to Georgia.

This statute, approved October 27, 1887, remained until 1893 the basis of the educational legislation of the State of Georgia. During the six years intervening several additions were made, and after 1893 other additions were adopted, besides a constant stream of enactments authorizing the establishment of local systems of graded schools, supported in part by local taxation and separate in their administration from the State public school system.

More and more, under the double pressure of the continued poverty of the agricultural districts and the attraction of the larger villages and cities, the people of substance during the preceding ten years had been leaving the open country and crowding the new centers of population. And one very important reason for this movement was the difficulty of educating the children in the brief terms of the rural schools, often held in buildings unfit for the habitation of children, under teachers working at \$150 a year or less. Under these conditions it had come to pass that as late as 1893 these places, containing one-fourth the entire school population of the State, 113,037, with 45,791 enrolled and 32,966 in average attendance, expended more than half the State revenue for schools (\$573,249 out of \$1,058,198). These schools were all graded and in session from five to nine months in the year. Their teachers received an average of more than three times the salary of the country instructors, and practically monopolized the trained expert and professional class. The great disparity between the educational opportunities of the city and larger villages and those of the open country accounts largely also for the slow progress of the legislature.

The new law authorizing local taxation seems to have been designed as an obstacle rather than an invitation to such action, requiring a decree of the grand jury, backed by a two-thirds vote of the entire voting population. Meanwhile the people for whose benefit the schools were supported had absolutely no directing power in the method of their operation or the direction of their instruction.

In his second and final biennial report (for 1889-90) Commissioner Hook repeats the substance of his former communications to the legislature concerning the possibility of securing the entire rental of the Western and Atlantic Railroad, and reviewing the act of 1858 issuing bonds to the amount of \$350,000 as a school fund. As the former suggestion was never adopted, and the legislature brought the elaborate discussion over the latter contribution to a sudden finish by burning these bonds, which had never been negotiated, these with several other plausible suggestions for increasing the school funds without the necessity of the people putting their hands in their pockets, drifted downstream. A series of printed replies by the commissioners of 70 counties to a circular generally encouraging, but all insisting on the need of longer school terms and more money, are cheerful reading. It is interesting to note that Washington County, one of the first in the State to show its interest in education, was still in advance, its population of 30,000, with a school population of 10,000, being served by 100 satisfactory schools (60 white and 40 colored), new schoolhouses

going up, and the school terms being generally six, but often eight or nine months. A practical suggestion is repeated from his former report by the commissioner, namely, that the laws which practically are a barrier against local taxation for the improvement of schools be changed to a local-option statute, by which every county may tax itself to supplement the State fund, and thereby lift from the people of the rural districts the necessity of abandoning the open country and crowding into the cities and villages to educate their children. A publication of the doings of the commissioners concerning that portion of the school laws peculiar to the State of Georgia, whereby a practical union of the public and private and even denominational schools is secured, is reliable as being drawn up by a commissioner of legal acquirements. The practical result of all the school legislation in the State at this period was that the State of Georgia had not yet adopted fully the American system of common school education, the fundamental idea of which is that the whole people educate the children, and no public funds are to be disbursed for private, corporate, or denominational schools. The commissioner urges the necessity of better provision for the training of teachers, stating that in 1890 Georgia was "one of the four or five States in the great Union of 42 States that had no normal school." His own plan was the one adopted from the practice of some of the Western States, which support a corps of institute conductors who, during a portion of the year, are connected officially with the work of its normal schools. He proposes that a central school should be established, with six well-chosen normal instructors, who would serve in the institution for two, three, or four months for the convenience of teachers desiring to attend, only giving instruction in methods of teaching. When the term closed each of these should be detailed as a sort of supervisor of normal institutes for a district of 20 to 22 counties, and, with the help of local educators, hold a normal for the training of the negroes. The Peabody Institutes, though supported by the supply of funds from Doctor Curry, were not largely attended, owing somewhat to the fact that the teachers were not able, on their small salaries, to enjoy this summer outing.

The enrollment of the common schools in 1889 exceeded by 200 that of 1887, reaching 342,496, and was the largest since the origin of the school system, in 1871. The average attendance was 230,384, the largest on record. The State school fund for 1890, including the poll tax, was \$826,656.05. The commissioner disapproves of the law by which the entire supervision of the schools of a rural district is in charge of the county school board. The entire sum, including local funds, received in 1890 was \$1,021,195.03, the people of 26 localities, not exceeding one-fourth of the entire State, expending one-half as much as the countryside. The administration of Judge Hook had one important feature, in furnishing as the working head of the school system a man of approved legal reputation, which too often can not be said of the official on whom the responsibility for educational affairs is placed.

In 1891 Mr. W. J. Northen was inaugurated as governor of Georgia. Governor Northen entered upon the administration of his office with a deep sense of the importance of education and the determination to remove some of the existing defects of the public school system, already for twenty years on the ground. The predecessor of Governor Northen, Gen. John B. Gordon, in his closing message to the general assembly, in November, 1890, deals thoroughly with the subject of reform in the criminal administration and the common and university systems of schools. Concerning the system of criminal administration he presents an argument which might well have justified the declarations of his successors, that the convict system of the State, as then administered, was a nursery of crime. He speaks of the proper disposal of the Congressional land fund for the establishment of agricultural and mechanical colleges, and the

additional grant of \$15,000 by Congress for the further supply of these institutions, a fund destined to increase for ten years until it should remain a permanent annual gift of \$25,000 to every State. Both the act of 1862 and that of 1890 contained the provision that no distinction should be made between the two races of people, white and negro, in their application. Acting on this line, the legislature had given to the colored youth of the State \$8,000 a year under the act of 1862. A department in the University of Georgia had been established for the carrying out of this purpose in instruction and experimenting. The \$8,000 appropriated to the colored race had been given to Atlanta University for several years. It was withdrawn about this time, and for three years the money was covered into the State treasury, to the amount of \$25,000. Governor Gordon proposed that this should be used for the education of the colored youth in such a way as might be deemed expedient by the legislature, and the entire subject of the use of the fund for this race was referred to the general assembly.

In regard to the common schools of the State, the governor strongly urges the establishment of a permanent common school fund. In 1889 the schools had received \$165,000 and in 1890 \$330,000 from the State school tax, besides \$50,575 in 1890 and \$140,000 in 1891 from taxes on property in excess of a valuation of \$260,000,000. They had also received \$150,000 from one-half the annual rental of the Western and Atlantic Railroad, with smaller amounts from several sources. But the governor declares that there is no permanence in this matter of supplying the schools. Any of these gifts can be withdrawn. He reminds the people of the law dedicating one-half the rental of the railroad permanently to the schools, and the further inauguration of "measures looking to the creation of a permanent school fund which shall be sufficient to support the schools six months and make them independent of the constantly changing opinions and policies of different legislatures." Also he advocates the establishment of normal schools in the State as a matter of primary necessity, and suggests that a fund of \$15,000 supplied by the State treasury and the amount received from the Peabody fund might well be so appropriated.

The school of technology is warmly lauded "as the basis of industrial progress in the State." The legislature of 1888 had given the sum of \$18,000 for the support of this school in 1890, but had omitted the intervening year 1889. In consequence, the faculty of the school had carried it on their shoulders and loaded it with a deficit of \$12,166, half of it a debt to the professors. Of the students, 40 per cent were sons of farmers, 24 per cent of mechanics, and only 9 per cent of manufacturers. In 1890 a law had been passed authorizing the establishment of a college of agriculture and manufactures for colored youth, as well as the continuance of the university department for white students.

In his message to the adjourned legislature, January 8, 1891, Governor Northen indorses the recommendations of the board of the university concerning the establishment of a normal school for white teachers at Athens, with the tender of the use of Rock College building, and 6 to 10 acres of land and the net income of the fund of Governor Gilmer, \$1,000, for the education of teachers. The governor heartily supports this plan and argues strongly for the establishment of this school. The strong appeals of Governor Northen in behalf of a decided and permanent State school fund brought from the legislature, on September 26, 1891, the provision for an increase in the State school tax for the year 1891-92 to 3½ mills on the dollar, with an additional tax of 1½ mills for 1891 and 1892; all this to be given for elementary instruction in the public schools. In addition to this the same legislature provided for the establishment of a teachers' institute in each county, compelling the attendance of all public school teachers and providing a fund to be applied to the establishment of

such institutes, \$25 being appropriated from the county fund to provide an expert in conducting the session of one week. The law of the same year for the more complete and severe examination of teachers was also a decided step forward; also the provision given to county boards of education to employ teachers on a regular salary, estimated on an enumeration of the attendance of the pupils. The State commissioner was also directed to make a full biennial report concerning the public and private schools of the State, including all colleges.

Mr. S. D. Bradwell was appointed State commissioner of schools in 1891. His first impression is that "the common school system is more popular than it has ever been, and fresh impetus has been given to all the interests of popular education." The State fund under the quickening stimulant of increased taxation had risen from \$638,656 in 1890 to \$935,611 in 1891 and \$951,700 in 1892. The addition of the poll tax to the State fund, which was derived from ten different sources, brought the entire amount in 1891 to \$1,144,351.69. The commissioner had taken advantage of this increase of the fund to increase the school term to five months. The school population of 1892 was 560,281 (296,388 white and 263,893 colored). It was evident that the coming year would show a school population of 600,000 between 6 and 18 years of age. In 1891 the enrollment was 360,268 and the average attendance 205,226, 37 per cent of the school children of the State, this enumeration only including the rural districts. The cities would have made a more favorable showing. The school fund was apportioned on the basis of school population, but paid out on the basis of average school attendance. There were 7,022 schools in the State system, 7,420 teachers, and 360,268 pupils, with an average attendance of 205,226. Of these, only 82,227 were reported as studying English grammar and 105,369 geography.

The terms of office of the county school commissioners, four years in duration, generally expired during the year 1892, and the examination and election of their successors was held on the same day. The commissioner flatters himself that his efforts to secure competent occupants for these offices were successful, and that "in a large majority of cases faithful and efficient officers were secured." But as far as the conduct of the schools was concerned, even in the towns, the majority of which were under the supervision of the county officials, this officer was oftener than otherwise the least efficient agency in the service. The reports from these county officials give undeniable evidence that this radical feature of the State rural system was sorely in need of reform.

In 1892, 25 counties had failed to collect State taxes sufficient to meet the appropriations allotted to them for schools, and the deficit had to be made up from the State treasury. Several combined sessions of the teachers' institutes were held. The problem presented to the trustees of the State normal school for white pupils at Athens was "to operate a college without money." This body solved the problem by making it, during a portion of the year, a teachers' institute. The legislature in 1890 finished the controversy concerning the \$350,000 of bonds appropriated as a school fund in 1858, under the governorship of Hon. Joseph E. Brown, by ordering the destruction of the bonds, none of which had been negotiated. An important decision of the supreme court of the State was quoted in this report, which holds that the State makes no provision whatever for secondary education, the elementary (or primary) and university being alone provided for. But this decision, although correct in theory, left out the fact that all the branches of the university, including the normal and industrial college and other schools, the normal schools for white and colored pupils, and the school of technology, were all in the secondary or high school department of school life. In 1891 Doctor

Curry, agent of the Peabody fund, had contributed \$3,500 for teachers' institutes and public schools, and \$3,800 in 1892 for the same purposes.

The recommendations of the State commissioner to the legislature in 1891 were: (1) That the powers of the local school authorities should be more accurately defined; the county board of education should be the decisive authority, and the county school commissioner its executive officer and servant; (2) that the State commissioner should make an annual instead of a biennial report to the governor; (3) that all school funds, including the poll tax, be paid into the State treasury; (4) that a portion of the salaries of the teachers be paid each quarter; (5) that \$50 instead of \$25 be appropriated from the school fund of each county for the payment of two expert conductors of teachers' institutes; (6) that a maximum allowance of \$2 per day for each day's actual attendance be made to the members of the county boards of education; (7) that the power of county boards be restricted in the location of schools, that their expenditure for supplies and maps and furniture be limited to one-twentieth of the educational school fund of the year, and that their power to build schoolhouses be enlarged; (8) that a history of the State for elementary schools and the constitutions of the United States and the State of Georgia be added to the list of text-books.

The legislature of 1892 enacted an amendment to the school law ordering an annual report from the State commissioner of education, and Commissioner Bradwell sent in his second communication to the general assembly October 25, 1893, repeating his account of the operation of the common school system. The State board of education had adopted the title "common" in place of "public" schools, as is the ordinary title in the South. The commissioner congratulates the legislature on the steady growth of the common schools, especially due to the adoption of the principle of State taxation in 1889. From this source alone the following sums had been derived, in addition to other sums: 1889, \$165,000; 1890, \$380,575; 1891, \$640,692; 1892, \$597,555; 1893, \$688,560. In 1893 the State school fund, apart from the amount raised by the 25 cities and counties under local laws had reached the sum of \$1,058,532.52 (poll tax not included). The commissioner urges—(1) quarterly payments to teachers; (2) the payment of all school moneys into the State treasury, including the poll tax; (3) the employment of teachers at a fixed salary; (4) improvement in supervision, with several matters of minor importance.

On October 24, 1894, Commissioner Bradwell made his third and closing report to the general assembly of Georgia, for the year 1893, with a brief account of what had been done since the close of that year.

The State school fund (including the poll tax) in 1893 amounted to \$1,274,412.09, of which \$88,560 was from tax on the \$30,000,000 excess of State valuation. The appropriation by the legislature was \$600,000, and the largest of the extraneous receipts were from the half rental of the State railroad (\$210,006) and the liquor tax (\$115,868.47). With this sum in sight it was decided to operate the schools for five months, or 100 days. The enrollment of 1893, excluding local systems, showed an increase of 20,737, and the average attendance one of 17,641; there were 147 more schools and 192 more teachers; the local systems showed an increase of 303 in enrollment and 979 decrease in average attendance. The tax levy for 1894 had been fixed at 1.44 mills, and it was estimated that in 1894-95 there would be no excess. The act for the quarterly payment of teachers changed the school year so as to run from July to July, and \$300,000 were borrowed from other funds in the State treasury to make the first of the quarterly payments. The commissioner argues that "the people are more willing than ever to support the common school system. The teachers are on a higher plane of usefulness and the children are improving

more rapidly than ever before." During the three years of the existence of the State normal school at Athens the legislature had persisted in its determination not to support it by the State. In 1894 the trustees decided to keep the school open one month on the \$1,000 from the Gilmer fund of the State university and a grant of \$750 by the grand jury of Clark County. The railroads cooperated. No tuition fees were charged. Board was furnished at the college building for \$3 per week, each teacher furnishing his own bedding and table, furniture, text-books, and stationery. From 6 a. m. to 10 p. m. the days were filled with the numerous exercises of the school; nine evening lectures were delivered in 1904. A library of educational reading was furnished by the university and the city of Athens. The enrollment was 175, from 51 counties, the average daily attendance being 125. After this proof of the public spirit of the teachers and faculty, an appeal was made to the general assembly by the school in 1894 to "establish on a permanent basis a normal school thoroughly equipped for training teachers of both sexes."

The four years' administration of Governor Northen and State Commissioner Bradwell closed in 1894. No governor of Georgia had ever manifested the interest in or displayed the persistent resolution to favor the common school system of the State to the degree of this official, rightly named "the friend of education." Like all men in his position, he had not been able to accomplish much that he had anticipated. But he had arrested the tendency to reaction that always gathers head unless a policy of administration is formulated and pushed with vigor, and he had succeeded in impressing upon the legislature the absolute necessity of the common school interest and of the special furtherance of industrial, normal, and the higher education. Such an administration does its best work by building a school platform on which its successors can stand and press onward to better things. Without this advance of the four years from 1890 to 1894, the record of popular education in Georgia under the leadership of the eminent successor of Commissioner Bradwell would have been far different from what it was.

The successor of Commissioner Bradwell was Mr. G. R. Glenn, who on November 1, 1895, submitted his first annual report, covering the year 1894. Under the governorship of Hon. W. Y. Atkinson and the administration of Commissioner Glenn, whose term was extended beyond the date of this record (1900), the public school interest was lifted up to a condition of progress, which, with one brief period of reaction in the legislature, was prophetic of all the success proposed but never realized by all his predecessors. The commissioner declares at the outset: "We have no problem before us in Georgia to-day whose solution is attended with such grave results as is this problem of the education of our children." The private schools had nearly all disappeared, and even the buildings in which the majority of these schools had been housed were well-nigh gone, and in their place we find, in 1894, according to the commissioner, "a great many small schoolhouses, wretchedly uncomfortable, and unfit for school purposes." "The teachers in charge of these schools," he writes, "are receiving the pittance that comes from the public fund, and, as a rule, receiving no other fees in the way of tuition. The best teachers have all abandoned the rural districts and gone to the towns and cities, or else they have left the school-room altogether for some other means of livelihood." During the year 1894 the commissioner had visited 90 counties and learned that the country people through all sections of the State were fast leaving the country and moving to the towns; the explanation that they gave being that the inefficiency of the country schools was driving them to the towns and cities to educate their children. "For several years past there has been a decreasing valuation of the farm lands of Georgia, which will go on unless the public school system of the

country is improved. The remedy for this drain to the cities is the establishment of a school system for the rural districts that will make the conditions of life more endurable. The country people have come to rely on the State for education, and have well-nigh ceased to contribute anything to the salaries of the teachers in the way of private tuition fees. Although the public schools have a nominal term of five months in many places, for one cause and another the children only get a three months' school."

In the early part of the year the commissioner had sent a circular of inquiry to all the county commissioners of the State concerning the condition of the schoolhouses. The answers to this inquiry "present an appalling condition of the schoolhouses of the country." The commissioner seriously questions whether the children should be compelled to go to school at all during the summer months. "Yet in Georgia the rule is that the child in the country is compelled to go to school in the summer or not go at all. So one-half the children are not going to school at all, simply because they are compelled to be on the farms during the short school term. The remedy is a local tax upon all the counties that have not already imposed such a tax, for a continuous school term during the winter months of at least eight months, and out of this fund provision to be made for building and furnishing schoolhouses."

A college president informs the commissioner that of 250 boys graduated during the past ten years from his college, 175 began life teaching, yet of these only 20 are now in the schoolroom. He says: "A school system that promises no better pay for the teachers than our school system of Georgia provides will eventuate in driving out of the system all the teaching talent necessary to sustain a good system of schools." In relation to the institutes, the commissioner proposes that "a graded course of study for three years should be given to the teachers, and permanent licenses only to such as had completed this course, and that a corps of efficient experts or conductors should have exclusive charge of the institute work." The normal school at Athens had 140 pupils in attendance during the year 1894 and a faculty of 6 teachers. The school was conducted during six or eight weeks in the summer of 1894 on the same terms as in the two former years. In 1894 the legislature voted \$10,000 a year for the two years of 1895 and 1896, which made the normal school permanent. Ex-Superintendent Bradwell was promoted to the presidency of the reconstructed normal school at Athens, with a salary of \$1,800, and six associate teachers were paid salaries running from \$150 to \$500. The commissioner closes his report with a strong appeal to the general assembly to "give heed to this paramount question before the people of this great and rapidly growing Commonwealth."

Mr. E. C. Branson, one of the ablest of the rising young educators of the South, had been engaged during three summers studying the condition of city school teachers and public education in the State. In 1895 he conducted 11 institutes in as many counties. He reports: "When I came to Georgia twelve years ago the State was certainly behind all other States in the Union in this matter." The failure of the two Chautauqua assemblies attempted in the State was significant, but under the circumstances of the present year he declares the condition hopeful. He advises a more complete organization of this work—counties to be taken in groups of 20, and a corps of official experts to be engaged in the work of training the teachers.

The State Industrial College for colored youth had 20 pupils in 1894, including 100 in the model school, under the presidency of Mr. R. R. Wright, a graduate of Atlanta University. The official circulars of the new commissioner are often stringent appeals for an increased activity, and convey important information, as well as submit the most radical representations of the actual condition of affairs. It was evident that the day of writing a State report of education for

the purpose of excusing the defects of the common schools or their administration was past, as far as this able and uncompromising educator was concerned. The commissioner urges that the schools already established in the counties of which the cities are a unit should be brought under the same control, with equal appropriations for all children and youth, and preliminary to this a consolidation of county schools by erecting school buildings at proper centers and persuading the people to remove to these portions of the county. Commissioner Glenn heartily indorses the policy of educating the negro for his new citizenship in the State and the nation. He truly says: "We can not afford to leave the negro in the South without giving him education. If he remains here he must be educated. The only safety to our homes, the only safety to our women, the only safety to our public and private institutions is to elevate the colored man out of his animal propensities and his natural infirmities."

The State of Georgia, first and last, had received \$200,000 from the Peabody education fund. The commissioner suggests that the legislature "should make a formal recognition of this great gift of George Peabody, and aid in perpetuating his name among our people as one of the world's greatest philanthropists, by setting apart his birthday." Doctor Curry was a native of Georgia, born in Lincoln County, and had always taken a great interest in her educational affairs. At a recent visit he had made one of those notable speeches that have done so great a work in the States of the South. In October, 1894, 125 of the 137 county school commissioners assembled in convention for the discussion of the great educational interests of the State. The fact that so large a proportion of these men could be brought together was itself a proof of the increasing interest in education among the people. By an overwhelming majority they recommended, among other things, the imposition of a local tax upon the counties of not less than 3 mills for prolonging the school term and improving the public school system. The commissioner urges that the report of the State commissioner shall cover the entire educational work of the State. The Georgia Normal and Industrial College for Girls was the most prosperous of all the institutions for superior education in the State. Under the vigorous and intelligent administration of President J. Harris Chappell it had grown into a great seminary of all work, including the academical, collegiate, industrial, normal, and artistic training of 365 pupils, 309 engaged in college studies, and 56 children in the model school. Nearly 90 per cent of them were boarding pupils, "the largest boarding school that now exists or perhaps has ever existed in Georgia." They come from 96 counties of the State, "an extensiveness of State representation unequaled either now or in the past by any educational institution in Georgia." Seventy per cent of them were country girls; 76 had earned every cent of the money they expended during the year, chiefly by teaching in country schools, and a very large number were poor girls who, without such aid, could never have been educated. Over 50 per cent of the entire body—158—were in the normal department, the normal school being supported by a gift from the Peabody fund. The Northern Georgia Agricultural College, at Dahlonega, among the foothills of the Blue Ridge, in Lumpkin County, was evidently the most successful of the different annexes of the State university. It received a portion of the national fund for agricultural and mechanical instruction for the support of teachers, and every county was permitted to send a pupil. The attendance in 1894 was 189. A fund for student aid in 13 counties in Georgia and 3 in South Carolina, contributed by Governor Joseph Brown, distributed \$1,000 a year. The college was coeducational, the first of the sort established by the State of Georgia.

It rarely happens that the legislature of any American State is addressed by a public official in a manner at once so complimentary to its intelligence, so

adapted to the mind and heart of every member, so relentless as a searchlight upon the lowest depths of a great public necessity as the general assembly of Georgia at its session in 1896 by the State commissioner of education, Mr. G. R. Glenn, in his second report, dated October 1 of that year, and covering the school history of the year 1895. This report had been printed and mailed in advance to every member of the legislature before the meeting in general session. The commissioner declares that his object in this is to secure, if possible, the reading in detail of its contents. He says: "Our present system [of common schools] is totally and radically inadequate. Our schools at present, as far as the rural districts are concerned, last from three to five months. Neither the three months' system nor the five months' system is sufficient to educate Georgia children." With this trumpet blast of an introduction, the commissioner goes on through page after page in the most searching exposure of the radical deficiencies of the people's school system, now twenty-five years since its first organization under Doctor Orr, and despite the faithful services of this pioneer of education and his three able successors. During the past year the commissioner had put in an appearance in all save 10 of the 137 counties of the State. He declares: "I have been studying the people as I find them, noting the trend of their thinking, not only on the gold question or silver question or tariff question, but on the educational question. I do not know how much tariff is necessary to protect 'infant industries,' but I do know that we need more protective tariff for the children. I do not know the true natural relation between gold and silver, but I do know that the illiteracy and ignorance of the masses of our people is far too high for a great State like Georgia." The general impression is that "while nearly all the other States of the Union have completed their system of popular education, we have hardly begun. There are more than 40 States which rank higher than Georgia in the scale of intelligence, and only 3 States are lower in the scale of illiteracy than Georgia. Under the present state of things we shall soon bring all of the wealth and intelligence to the city centers and shall have an ignorant peasant population in the rural districts. The people are leaving the farms, simply because there are not schools sufficient to educate the children in the country. With all the educational advantages concentrated in the towns and cities, and scarcely any educational advantages in the country, the towns and cities will continue to increase in population and wealth, while the rural districts will continue to diminish in population and in wealth. In the year 1895, out of the 600,000 school population, about 250,000 did not attend school at all, and a large majority of these were in the rural districts. The schoolhouses were so notoriously incomplete that the scholars could not be cared for in the winter. The little short-term school was necessarily held in the spring and summer, at a time when nearly all the country children who were large enough to work were compelled to be in the fields. The remedy for all this is "a compulsory local tax that will provide better schoolhouses and more capable teachers for the country children."

The commissioner returns to his discussion of the education of the negro, which he opened in his first report. He says, "as a rule the negro makes the most of the opportunity which the State has provided for the education of his children." The statistics of 1895 are but little in advance of those of 1894. The school fund, all told, amounted to \$1,639,761.54. The value of the schoolhouses in 111 counties was \$589,771, and of the jails \$601,572. The school census in 1896 would probably show 650,000 between 6 and 18. The average school attendance in 1895 was 218,519. At least 250,000 children in the country who labor on the farms could not attend schools only held in the season of farm labor. Of the 7,982 teachers in the country schools of Georgia, only 695 had

normal training. The average value of the country schoolhouses was \$108. "This condition of affairs is a strong argument for local taxation for the betterment of the education of the vast majority of the children and youth who are outside the towns and cities." The movement for gathering school libraries deserves encouragement. In behalf of the claim of the State University upon the people the commissioner declares that 200 among its graduates have held high positions in various departments of public life, 3 have been elevated to the United States Supreme and district courts, and 100 have been made judges of different courts in Georgia and other States; nearly 150 clergymen of the different Protestant churches, 7 governors of Georgia, 1 of Alabama, and 2 lieutenant-governors of Mississippi, 30 members of the State senate and 115 of the house of representatives, 1 Secretary of the United States Treasury, 6 members of the United States Senate, 38 of the National House of Representatives; also the recent Confederate vice-president, 3 members of his cabinet, 2 of the senate and 16 of the house in the Confederate congress, and more than 60 college presidents are numbered among its graduates. The State normal reports an enrollment of 354 from 18 counties, some remaining from ten to twenty weeks, but the majority during the entire session. The attendance has outrun the accommodations, and Principal Bradwell represents the necessity of more room and other facilities. The State School of Technology, under the presidency of Lyman Hall, a lineal descendant of the first governor of the State, and the new Georgia Agricultural and Mechanical State Institute for colored youth are making progress. The Normal and Industrial College for Girls reports that over 300 young women from 95 counties appeared for the session of 1896, and that the number could have been doubled if there were more room in the college buildings to accommodate them.

On October 1, 1897, Commissioner Glenn renews the good fight for the children, in his third report, submitted to Governor Atkinson with the significant request, "I trust that this report will be carefully studied by your excellency and by every member of both branches of the legislature." He fortifies the assertions contained in his statement of the present status of the schools by the fact that "within the past two years I have visited personally every one of the 137 counties in the State. I have traveled 60,000 miles, and have delivered more than 500 addresses on education." He is happy to report, "there are many hopeful indications of an educational revival in the State." In a State like Georgia, where the fundamental difficulty seems to be the inability to support a thorough system of universal education, it is a great mistake to separate the cities and counties most distinguished by wealth and leading power from the masses of people inhabiting the great all-out-of-doors rural districts, on the one hand, and the university and the academies from both city and country common schools on the other.

It will be only a plain necessity to put on record the condition of the local systems of graded city schools in Georgia, although the limits of this essay prevent a detailed account of this department of education. But each of these communities has a peculiar educational history, whose study would be one of the most profitable for all who are called to labor in this field. There had been during the year 1896 an increase of 143 teachers, and there were 242 more trained teachers than before. The common school enrollment had increased 23,120. The county commissioners had made 1,873 more visits to the schools in 1896 than in 1895. There was an increase of 144 schoolhouses, with \$19,820 addition of value. There were 163 more white schools and 3 more colored schools in 1896 than before, there being 7,419 in all. There had been a "marked improvement" in the school buildings of the State during the past two years. The people of the country districts contributed to the furnishing of the new

schoolhouses. The commissioner returns to the original subject of local school taxation, and shows that, under the then existing system, the action of the grand juries often prevents the submission of the subject to the people, and such action is liable to increase the popular indifference. "The settlement of the rural school problem is the most vital question in Georgia." Another good sign noted by the earnest commissioner is "the interest displayed in popular education by the women's clubs in the State."

But the coming of the long-delayed revival of education was at hand, as shown by the action of the legislature in increasing the common school fund by \$400,000. This act had "provoked favorable comment all over the country." There was now \$1,000,000 raised by taxation for the public schools of Georgia. With 2,000,000 population its tax was about 50 cents per capita for the entire people. The statistics of common schools showed an increase for several years. The local systems represented 337 schools, 1,136 teachers, 57,114 pupils, and 40,951 in average attendance, educated at a per capita expense of \$12.79; \$191,109.04 contributed by the State, and \$358,353.51—more than one-third the common school fund—raised by local taxation. The school fund for the year 1897 was estimated at \$1,169,945. The Normal and Industrial College had received 379 students from 100 counties. The State Normal School was flourishing, having an attendance in 1897 of 500, and the possibility of 1,000 if the students could be received. The salaries of teachers range from \$1,900 for the president, through \$1,600, \$1,500, \$1,200, to \$200 for the janitor; \$20,229 were being expended.

We shall look in vain to any deliverance of any prominent educator of the South for a more concentrated and forcible presentation of the radical significance of the American public school movement to these States than is found in the first 10 pages of the report of Commissioner Glenn to the governor and general assembly of Georgia, submitted October 1, 1898, and nominally covering the operations of the system during the previous year, 1897. The superintendent had spent the three most laborious years of his administration largely among the people, leaving to competent assistants at the State house the management of the details of the office, which so often absorb the attention of that official. His powerful and eloquent characterization of the radical problems before the people of the State is enforced and applied by an equally conclusive discussion on industrial education, which he lifts quite above the crude materialistic notion that the laboring class of either race can be made to do better work and avoid the old-time waste by any other method than a gradual effort of an education that in waking up the mind and heart and soul results in "making its subject a man or woman of might wherever the light may be cast." In a return to the conduct of the teachers' institute, the commissioner shows that the meager sum of \$25 can not be trusted to attract to these gatherings the people that are necessary to secure a permanent success in their conduct. He cites the example of the State of New York, which has probably made the most of this important agency, which relies on select persons appointed by the State board of education, with sufficient salaries, to do the work of the institutes. "If the State were divided into 5 districts, five capable men could organize and carry on the work in a way to be felt all over the Commonwealth." The State now contributes enough money—\$1,600,000—to the common school system. The people, through local taxes, should do the rest. The school census of 1898 shows a school population of 660,870; in 1893, 604,971. The number of illiterates among the school population in 1893 was 114,527; in 1898, 83,616, a decrease of 30,911. The school population of the negro race is gaining more rapidly than the white. The value of the school books in use in the State was \$400,000; the cost for one year, \$125,000. There had been an increase of 28,408 in the average

attendance in one year, making the number 234,140. There had been an increase of \$4,703.10 in the payment to teachers from 1896 to 1897, 147 additional normal-trained teachers, and \$27,253.94 increase in the sum of \$415,607.45 raised by local taxation.

The recommendations of the commissioner are: (1) The broadening of the course of study in the common schools and the addition of industrial features, (2) the monthly payment of teachers, (3) compulsory grading of certain schools, (4) longer contracts with teachers, (5) a commission to formulate a proper industrial course of study for the common schools. The total of the State apportionment for the year 1898 was estimated at \$1,640,381, about \$470,000 more than for 1897. The reports from the State schools of the higher and secondary education do not differ materially from those of the previous year. Probably the most important addition to the faculties of this grade of schools was the appointment of Prof. E. C. Branson to the department of pedagogy in the normal and industrial college for girls.

But it would be too much to expect that a movement such as was inaugurated by Commissioner Glenn, even if apparently triumphant for a season, would have free course without encountering a reaction proportioned to its success. In his report for 1897, rendered October, 1898, the commissioner stood upon the pinnacle of success. But meanwhile there was "a lion in the way," which was to be met and overcome. For some cause not connected with the subject of this essay, a deficit in the State funds compelled a public campaign of "economy." Governor A. D. Candler was elected on this issue. On assuming office in 1898 it appeared to him and the legislature that the only opportunity to apply the knife of "retrenchment" was offered by the State school fund. The direct appropriation under the vigorous campaign of Commissioner Glenn had been increased \$400,000 and amounted to \$1,000,000, while the poll tax and other sources of income made the total sum apportioned by the State \$1,600,000, which, with the \$400,000 derived from the local tax communities, increased the sum to \$2,000,000. Without consulting with the commissioner, it is said, a bill was introduced in the legislature reducing the annual appropriation to its former sum, \$600,000, and forced through one branch of the general assembly with the indorsement of the governor before the fact was realized. A vigorous rally of the educational public, represented by the county commissioners, led by the courageous commissioner, arrested the progress of this revolutionary movement and forced a compromise on a \$200,000 reduction of the State appropriation. The brave commissioner, although baffled in his hopes and disappointed in his estimate of the staying quality of the legislature, returns to the war in his report covering the year 1898, when this act went into operation. He tells the general assembly that "the legislature can not afford to lessen the school privileges of the children." The school population is increasing at the annual rate of 12,000 to 15,000. During the last five years it has increased 60,000. By 1903 there will probably be an increase from 1898 of 75,000. "Any reduction in the school fund lessens our ability to provide for this increasing number of children that must be added to our school rolls. If the school fund remains the same next year as it is this year many of the counties will continue to have only four months of school term. Any half-hearted educational policy or time-serving political expedient is little short of suicidal. If education is worth anything, it is worth everything." The commissioner presents the needs of the State Normal School, and again enforces the importance of a local-option law providing for local taxation. The attendance on the higher educational institutions had been larger in 1898 than in any previous year. Hon. Walter B. Hill had been elected chancellor of the State university in place of Chancellor Boggs, resigned. The average attendance in the common schools

was 231,060. There had been a decrease of \$59,539 in the amount raised by local taxation for the local school systems.

The Normal and Industrial College reported as usual that the attendance was only limited by the accommodations for students; 442 was the total number for the year 1898-99, 90 of the counties being represented; 165 young women, nearly 50 per cent of the student body, were preparing for the profession of teacher. The North Georgia Agricultural College had 237 students from 60 counties, the collegiate department being on a par with other colleges and the State University. The normal department aimed chiefly at the preparation of students for secondary school work. The State Normal School reached an enrollment of 714 in 1899, although, as many of the students were teaching five months in the year, the average attendance was not more than one-half the enrollment. The majority of the students spend portions of each year for four years in going through the full course. The legislature cut down the appropriation from \$22,500 to \$16,000 for the years 1899 and 1900. It passed a law providing for the monthly payment of teachers, and gave to the county school boards free authority to fix the length of school terms in the counties and the time best for the sessions of the schools, so that "the entire responsibility for the conduct of the schools was referred to the county board." The commissioner says: "We will have for 1899 \$242,000 less than we had in 1898. It will not do to sit down and complain because the school fund has been cut." He urges a new outburst of energy and fidelity among the people. "The people will respond as fast as they are made to see the value of the schools." In February, 1899, there was not enough money in the treasury to pay for the first month's school work and but one month's payment could be made on March 1. A meeting of the county commissioners was called at Atlanta and held on May 16, 17, 18. The demonstrations at that gathering, the largest ever held in the State, were such that it would seem that no governor or legislature would again try the experiment of "economizing" at the school end of the Commonwealth. Among the suggestions of the county superintendents, published in the report of the commissioner, was one that the county commissioner should be called a superintendent, so that the title would correspond to the performance of the duty, and that he should receive a suitable compensation; also, that the schools should be removed from the "church houses" and placed in public school-houses; that the commissioner should be relieved from clerical work in order to give more attention to the proper supervision of the schools; that a local tax should be levied that would touch every parent and wake up the people from their dream of "glorious independence" and indifference; that a proper school of manual training should be established in every county and a permanent institute fund be voted by the legislature. A free high school should be established in each county. Better supervision of schools and the reduction of the number are also urged.

The educational affairs of this great Commonwealth would be very improperly appreciated were not the record of the working of the State system proper, which was concerned with only the lower story and the summit, supplemented by an account of the secondary and graded school systems then adopted in nearly all the cities and in many sections of the open country. Here, in nearly 100 of the foremost communities of the State, where was concentrated in 1898-99 a majority of the wealth, culture, and leadership in all directions, a sum nearly half as large as that raised by State taxation was expended on less than one-fourth of the children. But unfortunately the educational system of the State, as its foundation, was modeled on the plan of the State of New York, wherein the State University was supposed to include the entire schooling of the higher and secondary education, leaving the elementary schools of the

masses to be brought into proper connection with the superior departments only through many years of organization and reorganization.

In October, 1902, Supt. G. R. Glenn writes his final word to the State at the end of eight years of strenuous service to the people of Georgia. He reiterates his constant assertion that a system of schools that will give all the children a fair chance in the race for life can not be maintained on an expenditure of \$2.31 per child of school age and 89 cents per capita of population. He believes that no State has done more than Georgia on a sum so inadequate. The great obstacles are one class who do not believe in a common school system at all, and another class who believe in it only for the white population, leaving the colored people, 45 per cent of the whole, uncared for. As it is, the white population, 55 per cent, receive 80 per cent of the school fund. He leaves his office with a petition for the kind treatment of his successor.

But although this record of the operations of the common school system, as concerned with the rural schools of the State, reveals elements of discouragement that for a time arrested the revival of interest which has since come to pass, it would be unjust to this great Commonwealth to omit other features of its educational history during the thirty years since the organization of the present system of popular education. In 1900 there were 390 "schools under local laws" which do not appear save incidentally in the reports of the State commissioner, but which include the entire secondary department of the public school system. They consist of the graded schools of the large number of towns, cities, and counties, each of which has organized its educational system under a law providing for local taxation to supplement the State distribution of school funds. Under these laws, as applied, we find in 1900 a body of 1,099 teachers and 55,000 pupils, educated at an expense of \$622,252.61, of which \$423,287.88 was raised by local taxation. These schools receive nearly one-half the sum expended on the 600,000 school population of the State. They are generally under a superintendent, who with his teachers represents an order of ability superior to that usually found among the teachers or county school commissioners of the open country. The cost of education per capita of enrollment in these schools was \$11.64, and the school terms are continued to six, eight, and nine months. Under the comparatively meager arrangements for the proper training of teachers in the State it is probable that a large proportion of the superior instructors are found in these communities. Doubtless one explanation of the reluctance of the legislature to supply adequate schooling for the country people, many of whom, of course, belong to the colored race, is the steady drain of the more enterprising and ambitious of the white people from the open country to the 400 centers of population, many of them thriving villages and small cities, where the children can obtain a much larger quantity and a better quality of schooling. This would leave the people of these communities practically unconcerned for the condition of the people left behind, while the great majority of the country folk would be open to all the influences, political, economical, and antieducational, that are always at work to undermine the building for the children.

Besides this, there is, in addition to all the departments of public education, still a powerful body of denominational and private seminaries of the secondary and higher education in Georgia; possibly a number as large in proportion to the entire population as remains in any State of the South. In 1900 there were 130 of these schools, 30 of them under the name of "college," besides the State University and its annexes, including the Institute of Technology. These schools provided for 10,000 students, remained in session for nine to eleven months in the year, and were conducted at a cost of nearly \$500,000. Several of them were proper colleges, of the average reputation of such institutions.

The State of Georgia has also been favored with an unusual development of the secondary and higher education of the colored race. In the Report of the United States Commissioner of Education for 1902, chapter 5, will be found an account of the establishment of several of the best known of the seminaries, which, under the name of "college" or "university," have been established in the South by the different religious bodies of the Northern States. The city of Atlanta has been specially favored with no less than seven of these great schools, which, in the number of their students, ability of their teachers, and extensiveness of their buildings and facilities for the secondary and higher training, have not been surpassed in the State. Indeed, so marked has been their impression on the city of Atlanta that so far it has not been found necessary to supplement its system of common and grammar school training with a high school department for the colored people. It is not improbable that the city of Atlanta receives as much income from the location of these great schools as it pays for the public schooling of this entire class of its population. Among these seminaries is the Gammon Theological School, with a location and provision for students and an endowment perhaps equal to any in the Southern States. It is impossible to estimate the influence of these schools upon the colored people of a State like Georgia, since the superior teachers of the colored public schools are very largely supplied from this source, and the great general uplift of their students mentally and morally can not be denied.

There are no proper statistics of the large number of private and church elementary schools in Georgia which are able to maintain a session of eight months a year, because their income is eked out by a subsidy from the public school fund, managed by the authorities of the open country. Of course, in estimating the amount of schooling received by the people of any State all circumstances like these must be taken into account. Still the fact that in 1898 12.6 per cent of the total population of the State was reported by its State commissioner of education as illiterate, 6.7 per cent of the white and 18.9 per cent of the colored, furnishes one of the most cogent arguments for an effective system of public instruction that will lift the whole people out of a situation so hostile to its material and every other type of prosperity.

One of the most interesting points in the great work of educational development that has gone on through the past thirty years in the State of Georgia is the record of the establishment of the graded school system in the different cities. Of these, perhaps 20 of the 400 under city administration support complete local systems. Of these systems, 9 in 1900 contained each over 1,000 pupils, among them Atlanta, 14,000; Savannah, 8,700; Macon, 7,300; Augusta, 6,400; Columbus, 2,700; Rome, 2,500. The schools of all these and of a number of those containing more than 500 pupils are among the best in the Southern States. Their superintendents and teachers in the past and present are represented by men like Mallon, Ziegler, Branson, Evans, Miss Laura Haygood, and others only less eminent. One of the most interesting problems for the student of municipal history in the United States is found in the establishment of the American common school system and its development and influence on the entire community in cities of this kind. Unfortunately the local reports of even these leading cities of the State are not sufficiently ample to furnish the material for a detailed account of their success in this, the most vital department of municipal life.

In several of the larger cities of Georgia an excellent habit prevails of including the entire county in the general graded system of education, giving to the pupils of the suburban region practically equal advantages with those of the city. One of the earliest of the towns in the State to take advantage of the original offer (in 1783) of 1,000 acres of wild land for a free school was Augusta,

then the seat of government. By this allotment the town was able to establish the Richmond Academy, which for nearly a century had gone on, with the usual experiences of similar institutions in the Southern States. In 1872 the people of the city and adjacent country, despairing of their ability to improve the district and ward school system under the obstacles furnished by the public school laws, formed "a confederate board of city trustees," a practical union of the several districts in a proper school system. Under this arrangement the city established several new schools and improved others. There were four high schools, two in the city and two in incorporated villages in the country. Of these the Richmond Academy, regarded one of the best of its kind in the State, was the summit of the entire system. Normal classes for white and colored teachers were a part of the scheme. The fifth report of the new arrangement, in 1877, shows a population of the entire region of 23,768 white and 15,163 colored. There were 8,345 school children, of whom 4,912 were in the city. The schools remained in operation nine months; the attendance in the country was 2,016. In the country the schools were in operation six and one-fifth months; the expenditure was \$22,706. For several years the system was greatly favored in the president of the board of education, Mr. John S. Davidson. In 1883 Mr. Lawton B. Evans appeared as superintendent, a position he has held to the present time. The report of 1894 shows a steady success. The entire enrollment was 7,330, including 2,663 colored, with a general average attendance of 4,733. There were 158 teachers, 44 with some professional preparation. The schools were in session nine months, and the expenditure was \$121,137.29. This city, with Savannah and Macon, still continues the practice of admitting into the public school system several of the Catholic Church parochial schools, taught by members of the women's teacher sisterhoods, under regulations which are claimed to be in accordance with the State school legislation.

Attention has already in this essay been called to the city of Savannah and the county of Chatham. Early in the history of the State the Chatham Academy had been established in the city of Savannah, and in connection with the interesting Telfair institution for the promotion of art and science, it had contributed during the early years of the last century to the exceptional mental and social cultivation of this, one of the most attractive of the southern cities. At the close of the war, in 1866, the same arrangement that has already been described as existing in Augusta and Richmond County was adopted for the city of Savannah and the county of Chatham. Under this system the schools of Savannah and its suburban rural districts were developed into some of the best in the State. In 1900 there was an estimated school population in the entire school territory of 8,764, with an average attendance of 6,611, and 180 teachers. There were 18 schoolhouses, valued at \$190,000, besides 34 buildings not belonging to the county board, 29 of which were occupied by colored schools. The entire expense for the system was \$125,000. The location of the agricultural and mechanical college for colored youth was in this school district.

In Bibb County, including the city of Macon, organized under the same system, the enrollment includes 7,346 (3,119 colored), with 153 teachers, 64 of whom are claimed as normal graduates. An average monthly salary of \$45 is paid for the white and \$30 for colored teachers. The total expense is \$86,277.82.

The city of Atlanta presents the most complete example in Georgia of the organization of a common school system according to the methods prevailing in the majority of the larger municipalities of the Union. At an early period of the uprising of the city from its almost complete destruction at the close of the civil war, in 1871, the present school system was organized. The city was favored in securing the services of the Hon. Joseph Brown, ex-governor of the

State and United States Senator, as the president of the school board, a position occupied by him until his death. His successor was the Hon. Hoke Smith, the son of a distinguished educator and, during the second term of President Cleveland's Administration, Secretary of the Interior, also a steady and intelligent friend of education. The first superintendent of the new system was Mr. Bernard Mallon, called from a similar position in the public schools of Savannah. Under the administration of this able and devoted executive the schools were so organized that, in the sixth report (for 1877-78), we learn that after a temporary reaction the schools were well established. In 1875 the population of Atlanta was 32,000. The number of children of school age was 10,362 (7,238 white and 3,124 colored). The total attendance was 3,280; the average attendance, 2,400; 214 were enrolled in the two high schools. There were 53 teachers of the nine schools. There were said to be 800 pupils in attendance on private schools in the city. The value of school property was \$65,000. The expenses of the system were \$35,662.05. Superintendent Mallon had taken charge of the girls' high school, which he made also a seminary for the training of teachers, as well as one of the most promising schools of the kind in the State. Under this administration the schools continued until 1879, when Superintendent Mallon resigned, having supervised the system during the seven years of his incumbency and made it a model for the imitation of the other cities of the State. In that year the population of the city had risen to 40,000, with a school population of 10,340 and 4,000 pupils. The number of days the schools were in session was 197.

The successor of Superintendent Mallon was Mr. W. F. Slaton, who has held the position until the present day. Superintendent Mallon was followed in his principalship of the girls' high school by Miss Laura Haygood, sister of Bishop Atticus Haygood. Under her administration the school was developed into one of the most attractive of its class in the State or in the South; it remained under her charge until 1887, when she resigned to enter the missionary field as an organizer of a high school for native girls in China. Mr. H. H. Smith, the father of Hon. Hoke Smith, Miss S. McKinley, and Miss N. E. Sargent have succeeded in the principalship of this high school, now one of the most flourishing of its kind. In 1900 the number of children of school age in the city of Atlanta was 18,299, of whom 11,260 were enrolled, the average attendance being 10,169. The sum appropriated by the city was \$128,928.62, which, with \$39,864.70 from the State, made the total expenditure \$168,793.32. From the report of the Hon. Hoke Smith, president of the school board, to the mayor and general council of the city in 1900, we learn that "the schools of Atlanta are all crowded to an extent that prevents the best work from being done. Forty children are as many as one teacher should undertake to control and instruct. We have been compelled, in a majority of our schoolrooms under one teacher, to place 60 children. To relieve this pressure we really ought to increase 50 per cent the grammar schools of the city. We can not hope, however, to obtain so large a sum from a single year's appropriation. The growth of the city has caused an average increase of attendance by the children upon the schools of between 7 and 10 per cent annually. For the past ten years we have built only 2 grammar schools for white children, and the negro schools have received only the increase recently made by the additions to the Houston Street School. The appropriations to the schools have not increased with the growth of the city. During the past year the city appropriated for police purposes \$150,358.63, while it appropriated for the erection of new schoolhouses and for the education of 13,000 children only \$128,928.62. The last council was the first to give money to build a new schoolhouse since 1893. The city of Atlanta gives less than 10

per cent of her revenue to the schools of Atlanta." In a table published in his report it appears that the schools in 11 American cities of population similar to Atlanta receive from 20 to 36 per cent of the entire revenue. "There is need for 3 white grammar schools, with additions to others, and 4 new negro schools, with an additional girls' high school." "We are confronted with the necessity for so large an increase of school buildings now on account of the failure of the city council to furnish enough money for buildings during the past four years." The schools of Atlanta in 1901 received \$40,000 from the State, and in addition to this the board of education reports that the schools will need \$290,000 from the city. A lady board of school visitors is mentioned with appreciation for its excellent work, and the president of the board remarks that the only mistake in the matter was in not adding the ladies to the board of education.

In no State of the South has the recent revival of interest in public education met a more hearty response than in Georgia. Several important meetings of distinguished educators from within and without the State have been held there during the past year. A committee for a general waking up of the population of the rural districts has been appointed during the present year, of which the president of the Atlanta board of education, Hon. Hoke Smith, is one of the most active members. No American State that has once heartily adopted the American system of universal education has permanently repudiated it; and we are confident that the coming years of the new century will bring a hearty response to the original announcement concerning the importance of general education made by the Empire State of the South a century ago.

CHAPTER XVII.

INTRODUCTION OF REINDEER INTO ALASKA.

I.—PRELIMINARY REPORT OF THE GENERAL AGENT OF EDUCATION FOR ALASKA TO THE COMMISSIONER OF EDUCATION, 1890.^a

By Sheldon Jackson, General Agent of Education for Alaska.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., December 26, 1890.

THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: On the 5th instant I had the honor of transmitting to you a report from Dr. Sheldon Jackson, general agent of education for Alaska, in which he stated that the Eskimo of arctic Alaska were on the verge of starvation, and recommended that we avail ourselves of the benefit of the several acts of Congress for promoting instruction in agriculture and the mechanic arts, and thereby provide a way of introducing into Alaska the domesticated reindeer of Siberia.

On the 15th instant you very kindly transmitted the above communications to Congress for such action as might be necessary, and on the 19th instant a joint resolution was introduced into the House of Representatives authorizing the Secretary of the Interior to extend to Alaska the benefits of the act approved March 2, 1887, creating "agricultural experiment stations," and of an act approved August 30, 1890, for the better support of agricultural schools in the several States and Territories.

If this very desirable legislation is granted, and under its provisions a suitable school is established, it will be a comparatively easy matter to purchase in Siberia a herd of domesticated reindeer, transport them to Alaska, and give instruction in their care and management.

This would be a great step forward in lifting the native races of that boreal region out of barbarism and starting them toward civilization—a step from the grade of wild hunter to the grade of herdsmen who live on domesticated cattle—and besides this furnish an article of exportation and commerce. The native tribes on the Siberian side are thriving with their herds of reindeer.

It seems that all northern Alaska is filled with moss meadows (tundra) which furnish the very food that the reindeer requires.

Once started, the business would grow into large proportions, and the most serious problem that threatens Alaska will be solved.

Since the subject has been agitated a number of calls have been received by this Office for information with regard to it.

I would, therefore, respectfully request permission to publish in a small pamphlet the inclosed report of Dr. Sheldon Jackson with accompanying papers.

Respectfully, yours,

W. T. HARRIS, *Commissioner.*

^a Reprinted from the original document (Government Printing Office, 1891).

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., November 12, 1890.

HON. W. T. HARRIS, LL. D.,

Commissioner of Education of the United States.

DEAR SIR: In advance of a full report of operations in Alaska, I desire to call your attention to the need of legislation by Congress in order to secure for Alaska the benefits of the acts of Congress in 1887 and 1890 to promote instruction in agriculture and the mechanic arts.

And I do this now—

1. Because it is the short session of Congress, and whatever is done should be done at once; and

2. Because of the starving condition of the Eskimo on the arctic coast of Alaska, which condition will be relieved by the proposed legislation. (Appendixes A and B.)

From time immemorial they have lived upon the whale, the walrus, and the seal of their coasts, the fish and aquatic birds of their rivers, and the caribou or wild reindeer of their vast inland plains.

The supply of these in years past was abundant and furnished ample food for all the people; but fifty years ago American whalers, having largely exhausted the supply in other waters, found their way into the North Pacific Ocean. Then commenced for that section the slaughter and destruction of whales that went steadily forward at the rate of hundreds and thousands annually, until they were destroyed and driven out of the Pacific Ocean. They were then followed into Bering Sea and the slaughter went on. The whales took refuge among the ice fields of the Arctic Ocean, and thither the whalers followed. In this relentless hunt the remnant have been driven still farther into the inaccessible regions around the north pole and are no longer within reach of the natives. (Appendixes C, D, and E.)

As the great herds of buffalo that once roamed the western prairies have been exterminated for their pelts, so the whales have been sacrificed for the fat that encased their bodies and the bone that hung in their mouths. With the destruction of the whale one large source of food supply for the natives has been cut off.

Another large supply was derived from the walrus, which once swarmed in great numbers in those northern seas; but commerce wanted more ivory, and the whalers turned their attention to the walrus, destroying thousands annually for the sake of their tusks. Where a few years ago they were so numerous that their bellowings were heard above the roar of the waves and grinding and crashing of the ice fields, this year I cruised for weeks without seeing or hearing one. The walrus as a source of food supply is already practically extinct.

The seal and sea lion, once so common in Bering Sea, are now becoming so scarce that it is with difficulty that the natives procure a sufficient number of skins to cover their boats, and their flesh, on account of its rarity, has become a luxury.

In the past the natives, with tireless industry, caught and cured for use in their long winters great quantities of fish; but American canneries have already come to some of their streams, and will soon be found on all of them, both carrying the food out of the country and, by their wasteful methods, destroying the future supply. Five million cans of salmon annually shipped away from Alaska—and the business still in its infancy—means starvation to the native races in the near future.

With the advent of improved breech-loading firearms the wild reindeer are both being killed off and frightened away to the remote and more inaccessible regions of the interior (Appendix K), and another source of food supply is diminishing.^a

Thus the support of the people is largely gone, and the process of slow starvation and extermination has commenced along the whole arctic coast of Alaska. Villages that once numbered thousands have been reduced to hundreds; of some tribes but two or three

^a The reindeer have long since been driven away. (John W. Kelly, in *Ethnographical Memoranda Concerning the Arctic Eskimos in Alaska*, A. D. 1889, page 9.)

families remain. At Point Barrow, in 1828, Captain Beechey's expedition found Nuwuk a village of 1,000 people; in 1863 there were 309; now there are not over 100. In 1826 Captain Beechey speaks of finding a large population at Cape Franklin; to-day it is without an inhabitant. He also mentions a large village of 1,000 to 2,000 people on Schismareff Inlet; it has now but 3 houses.

According to Mr. John W. Kelly, who has written a monograph upon the arctic Eskimo of Alaska, Point Hope, at the commencement of the century, had a population of 2,000; now it has about 350. Mr. Kelly further says: "The Kavea country is almost depopulated, owing to the scarcity of game, which has been killed or driven away. * * * The coast tribes between Point Hope and Point Barrow have been cut down in population so as to be almost obliterated. The Kookpovoros of Point Lay have only 3 huts left; the Ootookas of Icy Cape, 1 hut; the Koogmute has 3 settlements of from 1 to 4 families; Sezaro has about 80 people."

Mr. Henry D. Woolfe, who has spent many years in the arctic region, writes: "Along the seacoast from Wainwright Inlet to Point Lay numerous remains of houses testify to the former number of the people. * * * From Cape Seppings to Cape Krusenstern and inland to Nounatok River there still remain about 40 people, the remnant of a tribe called Key wah ling nach ah mutes. They will in a few years entirely disappear as a distinctive tribe."

I myself saw a number of abandoned villages and crumbling houses during the summer, and wherever I visited the people I heard the same tale of destitution.

On the island of Attou, once famous for the number of its sea-otter skins, the catch for the past nine years has averaged but 3 sea-otter and 25 fox skins, an annual income of about \$2 for each person. The Alaska Commercial Company this past summer sent \$1,300 worth of provisions to keep them from starving.

At Akutan the whole catch for the past summer was 19 sea otters. This represents the entire support of 100 people for twelve months. At Unalaska both the agent of the Alaska Commercial Company and the teacher of the Government school testified that there would be great destitution among the people this winter because of the disappearance of the sea otter. At St. George Island the United States Treasury agent testified that there was not sufficient provision on the island to last through the season, and asked that a Government vessel might be sent with a full supply. At Cape Prince of Wales, Point Hope, and Point Barrow was the same account of short supply of food. At the latter place intimations were given that the natives in their distress would break into the Government warehouse and help themselves to the supply that is in store for shipwrecked whalers. At Point Barrow, largely owing to the insufficient food supply, the death rate is reported to the birth rate as 15 to 1. It does not take long to figure out the end. They will die off more and more rapidly as the already insufficient food supply becomes less and less.

INTRODUCTION OF REINDEER.

In this crisis it is important that steps should be taken at once to afford relief. Relief can, of course, be afforded by Congress voting an appropriation to feed them, as it has so many of the North American Indians. But I think that every one familiar with the feeding process among the Indians will devoutly wish that it may not be necessary to extend that system to the Eskimo of Alaska. It would cost hundreds of thousands of dollars annually, and, worse than that, degrade, pauperize, and finally exterminate the people. There is a better, cheaper, more practical, and more humane way, and that is to introduce into northern Alaska the domesticated reindeer (Appendixes F and G) of Siberia, and train the Eskimo young men in their management, care, and propagation.

This would in a few years create as permanent and secure a food supply for the Eskimo as cattle or sheep raising in Texas or New Mexico does for the people of those sections.

It may be necessary to afford temporary relief for two or three years to the Eskimo, until the herds of domestic reindeer can be started, but after that the people will be self-supporting.

As you well know, in the arctic and subarctic regions of Lapland and Siberia the domesticated reindeer is food, clothing, house, furniture, implements, and transportation to the people. Its milk and flesh furnish food; its marrow and tongue are considered choice delicacies; its blood mixed, with the contents of its stomach, is made into a favorite dish called in Siberia "manyalla;" its intestines are cleaned, filled with tallow, and eaten as a sausage; its skin is made into clothes, bedding, tent covers, reindeer harness, ropes, cords, and fish lines; the hard skin of the forelegs makes an excellent covering for snowshoes.^a

Its sinews are dried and pounded into a strong and lasting thread; its bones are soaked in seal oil and burned for fuel; its horns are made into various kinds of household implements, into weapons for hunting and war, and in the manufacture of sleds.

Indeed, I know of no other animal that in so many different ways can minister to the comfort and well-being of man in the far northern regions of the earth as the reindeer.^b

"The reindeer form their riches; these their tents,
Their robes, their beds, and all their homely wealth supply;
Their wholesome fare and cheerful cups."

Under favorable circumstances a swift reindeer can traverse 150 miles in a day. A speed of 100 miles per day is easily made. As a beast of burden, they can draw a load of 300 pounds. They yield a cupful of milk at a milking; this small quantity, however, is so thick and rich that it needs to be diluted with nearly a quart of water to make it drinkable. It has a strong flavor like goat's milk, and is more nutritious and nourishing than cow's milk. The Lapps manufacture from it butter and cheese. A dressed reindeer in Siberia weighs from 80 to 100 pounds. The reindeer feed upon the moss and other lichens that abound in the arctic regions, and the farther north the larger and stronger the reindeer.

Now, in central and arctic Alaska are between 300,000 and 400,000 square miles (an area equal to the New England and Middle States combined, together with Ohio, Indiana, and Illinois) of moss-covered tundra and rolling plains of grass that are specially adapted by nature for the grazing of the reindeer and is practically useless for any other purpose.

If it is a sound public policy to bore artesian wells and build water-storage reservoirs, by which thousands of arid acres can be reclaimed from barrenness and made fruitful, it is equally a sound public policy to stock the plains of Alaska with herds of domesticated reindeer, and cause those vast, dreary, desolate, frozen, and storm-swept regions to minister to the wealth, happiness, comfort, and well-being of man. What stock raising has been and is on the vast plains of Texas, Colorado, Wyoming, and Montana, reindeer raising can be in northern Alaska. In the corresponding regions of Lapland, in arctic Norway, and in Sweden and Russia are 27,000 people supporting themselves (besides paying a tax to the Government of \$400,000, or \$1 per head, for their reindeer) and procuring their food and clothing largely from their 400,000 domesticated reindeer. (Appendix H.) Also, in the corresponding regions of Siberia, with similar climate, soil, and environment (and only 40 miles distant at the straits), are thousands of Chukchees, Koraks, and other tribes fed and clothed by their tens of thousands of domesticated reindeer.

During the summer I visited four settlements of natives on the Siberian coast, the two extremes being 700 miles apart, and saw much of the people, both of the Koraks and Chukchees. I found them a good-sized, robust, fleshy, well-fed, pagan, half-civilized, nomad people, living largely on their herds of reindeer. Families own from 1,000 to 10,000 deer. These are divided into herds of from 1,000 to 1,500. One of these latter I visited on the beach near Cape Navarin. In arctic Siberia the natives with their reindeer have plenty; in arctic Alaska without the reindeer they are starving.

Then instead of feeding and pauperizing them, let us civilize, build up their manhood, and lift them into self-support by helping them to the reindeer. To stock Alaska with reindeer

^a Kennan's *Tent Life in Siberia*, p. 188.

^b Without the reindeer the Laplander could not exist in those northern regions; it is his horse, his beast of burden, his food, his clothing, his shoes, and his gloves. (Du Chaillu's *Land of the Midnight Sun*, vol. 2, p. 199.)

and make millions of acres of moss-covered tundra conducive to the wealth of the country would be a great and worthy event under any circumstances.

But just now it is specially important and urgent from the fact, stated in the opening of this report, that the destruction of the whale and walrus has brought large numbers of Eskimo face to face with starvation and that something must be done promptly to save them.

The introduction of the reindeer would ultimately afford them a steady and permanent food supply.

AGRICULTURAL EXPERIMENT STATION.

Passing from northern Alaska with its adaptation to reindeer raising, we find the whole southern coast, stretching for thousands of miles, to possess a temperate climate. This is due to the "Kuro-siwo" or "Japan current" of the Pacific Ocean. In this "temperate belt" it is probable that there are areas of greater or less extent that are adapted to agriculture. At least it is known that there are small farms or vegetable gardens on Kodiak and Afognak islands, on the shores of Cook's Inlet, and in southeastern Alaska. It is also known that wild berries grow in great profusion and abundance in many sections. But no intelligent and continued experiments have been made to test the agricultural and horticultural capabilities of the country.

Until a quite recent period (1867) the European population were fur-trading Russians. They were followed by fur-trading Americans, and more recently by the gold seekers. No one expected to remain long in the country, and there has been no incentive to carry forward intelligent experiments in agriculture.

As early as my first report to the Commissioner of Education (1885) I called attention to the fact that there was a very wide diversity of views concerning the agricultural and horticultural capabilities of Alaska, and necessarily very great ignorance; that no systematic effort intelligently prosecuted had ever been made to ascertain what could or what could not be raised to advantage; that it was of very great importance, both to the people of Alaska and the country at large that careful experiments should be made, extending over a term of years, to ascertain the vegetables, grains, grasses, berries, apples, plums, trees, flowers, etc., best adapted to the country; the best methods of cultivating, gathering, and curing the same; the planting and grafting of fruit trees; the development of the wild cranberry; cattle, hog, and poultry raising; butter and cheese making, etc. In 1886 my recommendation was taken up by the United States Commissioner of Agriculture, who, in his annual report for that year (p. 20), says: "Something in the line of experimental work might also be undertaken in Alaska, possibly with profit. It is well known that the Department of the Interior has established an agency for the promotion of education in that Territory.

"It has been suggested that a line of experiments, to be undertaken by this Department, would easily prove whatever of agricultural and horticultural capability may exist in the Territory. No careful attention seems to have been given there, as yet, to this branch of industry, and the resources of the country are quite unknown and undeveloped.

"The industrial training school at Sitka would furnish an admirable basis for a station, where could be conducted careful experiments to ascertain the agricultural products best adapted to the climate and soil of the Territory and what breeds of cattle and other domestic animals are most suited to its climate and soil.

"Such an experiment ought to extend over a series of years, and the result would amply repay any expenditure that Congress may choose to make in this direction."

In view, therefore, of the national importance of introducing the domesticated reindeer of Siberia into northern Alaska, and testing the agricultural capacity of southern Alaska, I most earnestly recommend that you secure the establishment of an "agricultural school and experiment station" in connection with the system of industrial education in Alaska.

By an act approved July 2, 1862, Congress made provision for schools for the "benefit of agriculture and the mechanic arts." By an act approved March 2, 1887, provision was made for "agricultural experiment stations" in connection with the agricultural schools. And by the act approved August 30, 1890, certain of the proceeds of the sale of public lands were set aside for the better support of these agricultural schools.

These acts of Congress require the assent of the legislature of the State or Territory in order that their provisions may become available.

But Alaska has no legislature, and is governed directly by Congress. On this account, and partly because nineteen-twentieths of the children to be benefited belong to the native races, Congress has committed to the Secretary of the Interior the duty of making "needful and proper provision for education in Alaska." It is, therefore, eminently proper that he should be authorized to extend to Alaska the benefits of the agricultural acts of 1887 and 1890 (Appendix J), and secure the establishment of a school that can introduce reindeer into that region and teach their management, care, and propagation, and also to conduct a series of experiments to determine the agricultural capabilities of the country.

To reclaim and make valuable vast areas of land otherwise worthless; to introduce large, permanent, and wealth-producing industries where none previously existed; to take a barbarian people on the verge of starvation and lift them up to a comfortable self-support and civilization, is certainly a work of national importance.

It was my good fortune to make my visit to the Eskimo in the United States revenue steamer *Bear*, commanded by Capt. Michael A. Healy, who has made an annual cruise in those waters for ten years past. Having seen much of the native population and taken a great interest in their welfare, he has probably a better knowledge of their condition and necessities than any other person. His attention was early called to the advantage that the introduction of domesticated reindeer would be to the inhabitants of northern Alaska, and he has given the subject considerable thought.

When, therefore, I suggested the feasibility of introducing the domesticated reindeer of Siberia into Alaska in connection with the Government industrial schools, and my purpose to recommend it, he immediately indorsed the proposition, and rendered me much assistance in pursuing my inquiries with regard to the subject. He is also ready to cooperate in carrying out any plan that may be devised. Feeling sure that this important matter will have your hearty assistance,

I remain, with great respect, very truly, yours,

SHELDON JACKSON,

United States General Agent of Education for Alaska.

APPENDIX A.

U. S. REVENUE STEAMER BEAR,

San Francisco, Cal., December 6, 1890.

Hon. W. T. HARRIS, LL.D.,

United States Commissioner of Education, Washington, D. C.

DEAR SIR: Under orders from the Secretary of the Treasury, I have been ten years on the Bering Sea and Arctic Ocean station of the United States Revenue-Marine Service.

My duties have brought me very closely in contact with and greatly interested me in the native population.

On account of this interest, I have watched with pleasure the coming among them of the missionaries of the several churches and the teachers of the Government schools.

I have also seen with apprehension the gradual exhaustion of the native food supply.

From time immemorial they have lived principally on the whale, seal, walrus, salmon, and wild reindeer. But in the persistent hunt of white men for the whale and walrus, the latter has largely disappeared, and the former been driven beyond the reach of the natives. The white men are also erecting canneries on their best fishing streams, and the usual supply of fish is being cut off; and with the advent of improved firearms the wild reindeer are migrating farther and farther away.

With the disappearance of the whale, walrus, salmon, and reindeer a very large portion of their food supply is taken away, and starvation and gradual extinction appear in the near future.

On my recent cruise I was accompanied by Dr. Sheldon Jackson, United States general agent of education, and together we have made the question of a future food supply the subject of special thought and investigation.

We have consulted with a few of the leading teachers, missionaries, traders, and whaling captains whom we have met, and they, without a single exception, agree with us that the most practical relief is the introduction of domesticated reindeer into that portion of northern and arctic Alaska adapted to them.

In Lapland there are 400,000 domesticated reindeer, sustaining a population of 27,000. In Siberia, but a few miles from Alaska, with climate and country of similar conditions, are tens of thousands of tame reindeer supporting thousands of people, and it will be a very easy and comparatively cheap matter to introduce the tame reindeer of Siberia into Alaska and teach the natives the care and management of them.

This it is proposed to do in connection with the industrial schools established among the natives by the Bureau of Education. As in connection with the industrial schools in Dakota, Indian Territory, and elsewhere, the Indian boy is taught the raising of stock, so in the industrial schools of Alaska it is proposed to teach the Eskimo young men the raising of tame reindeer.

A few thousand dollars expended now in the establishment of this new industry will save hundreds of thousands hereafter. For if the time comes when the Government will be compelled to feed these Eskimo it will cost over \$1,000,000.

In northern Alaska there are about 400,000 square miles that are adapted to the reindeer and are unfit for anything else.

This region has a present population of about 20,000, all of whom will be ultimately benefited by the new industry.

With an assured support such as will come from herds of tame reindeer, there is no reason why the present population shall not be increased in numbers and advanced to the position of civilized, wealth-producing American citizens.

Asking for your favorable consideration and earnest advocacy of this matter, I remain very respectfully,

M. A. HEALY,
Captain, United States Revenue Marine.

APPENDIX B.

DESTITUTION AMONG THE ALASKA ESKIMO.

[An interview with Capt. M. A. Healy, United States Revenue-Marine Service, in San Francisco Chronicle, December 12, 1890.]

For several seasons past the Eskimo of northwestern Alaska have experienced great hardships in obtaining a supply of deer meat for their winter stores. It is to be feared that when the *Bear* makes her annual visit to the Arctic next summer many of the villages will be found to have lost their residents from starvation. The latest advices from the Arctic report a failure not only in the autumn deer hunt, but in the entire catch of whales, walrus, and seals.

Naturally of a timid disposition the deer have learned that the natives with breechloading arms are far more formidable foes than when bows, arrows, and spears were employed in the chase. Again the Eskimo spare neither young or old when a herd is found, and little suckling fawns as well as does carrying young fall victims to their guns.

Formerly on the lower Yukon around St. Michael's on Norton Sound, and in the country known as the Kotzebue Sound district, numbers of deer made yearly visits. Now it is rare to find that the natives living at these points have seen or tasted deer meat.

The Alaskan deer of the Arctic and sub-Arctic regions have been confounded with the reindeer of other localities, but while certainly belonging to the rangifer family, they are the true barren-ground caribou, differing from the upland caribou and domesticated reindeer of Lapland and Siberia in being smaller in body and horns. From July to September the instincts of the deer induce them to come from the interior to the seacoast to obtain rest and freedom from the tortures inflicted by the hordes of mosquitoes that infest the inland swamps, and also to get saline matter from the herbage and moss growing in proximity to the ocean. In September they commence their inland migration, and from July until the middle of October they are ruthlessly pursued by the natives. Some rest is afforded to the animals during the dark days that prevail in the Arctic Zone from November until January, but as soon after the early part of February as the weather permits the food seekers again take the field. The does have their young during April, and by a provision of nature the horns of the female only attain size during the time she is suckling the fawn and until it reaches such an age that it can feed—about 2 months.

When it is considered that a deer weighing on an average 125 pounds is consumed at a single sitting by five or six natives it may be readily perceived that the average returns of a successful hunting party must be large to feed a village.

During the past season in the Arctic the attention of Captain Healy of the U. S. revenue steamer *Bear*, has been directed in a very pointed manner to the attainment of some method whereby the supply of deer for food and clothing purposes may be increased in northwestern Alaska. This year, taking advantage of the presence on the *Bear* of Dr. Sheldon Jackson, United States commissioner of education for Alaska, the captain, in conjunction with Commissioner Jackson, intends to present to the Secretary of the Interior data upon the subject.

Within a radius of 100 miles inland from the shores of the ocean on the Siberian coast, from Cape Navarin to Plover Bay, there are people known as deer men. They belong to the Chukchee tribe of

Siberians, and are essentially a nomadic race, wandering from East Cape, on the northern coast, to Cape Navarin, southward. Accompanied by their herds of tame reindeer, aggregating in many instances thousands, they roam in search of food. These reindeer, while resembling the Alaskan species in the main, differ in the texture of their skins, the pelts being spotted brown and white, with a smooth surface. These deer men subsist mainly on the products of their herds, bartering the skins with the coast natives for tobacco, seal oil, walrus hides for their boot soles, and other minor commodities such as powder, shot, lead, and flour. At Cape Navarin and East Cape, Siberia, they sometimes meet the whaling ships and sell them deer meat and skins for tobacco, etc.

Captain Healy's ideas are to propose to the Government that he be empowered to purchase a number of these deer of both sexes and transport them on the *Bear* to some point on the Alaskan coast where moss and feed are plentiful. These deer are to form the nucleus of a herd, and from the yearly increase they can be distributed over other portions of the Northwest Territory. As the Alaskan Eskimo are not skilled in herding the deer, Captain Healy intends, if permission be granted by the Government, to endeavor to enlist the services of some experienced Siberian natives to instruct them.

Unless some measures be adopted, as suggested by Captain Healy, it is sure that a decade will witness the extermination of the people of our arctic province on its northwest shores. The results of the active and unscrupulous chase of their pelagic food supplies by the whalers have already become evident; walrus are almost invisible on the ice-floes within reach of the native hunters, while the flurried and galled whale makes its passage to the unknown regions of the Arctic Ocean at a speed which defies the natives to capture it.

The proposition of Captain Healy will be communicated to the Washington authorities at an early date.

APPENDIX C.

DESTRUCTION OF THE WHALES.

[From Bancroft's History of Alaska, pages 668 and 669.]

Of whaling enterprise in the neighborhood of the Alaskan coast mention has already been made, but a few statements that will serve to explain the enormous decrease that has occurred in the catch within the last three decades may not be out of place.

Of the 600 or 700 American whalers that were fitted out for the season of 1857, at least one-half, including most of the larger vessels, were engaged in the North Pacific. The presence of so vast a fleet tended of course to exhaust the whaling grounds or to drive the fish into other waters, for there are no permanent whaling grounds on any portions of the globe except those encircled by ice for about ten months in the year. In the seas of Greenland not many years ago whales were rarely to be seen; in 1870 they were fairly plentiful. The sea of Okhotsk and the waters in the neighborhood of the Aleutian Islands were a few decades ago favorite hunting grounds but are now almost depleted, while in 1870 the coast of New Siberia was swarming with whales. Schools of sperm whale are occasionally seen between the Alaska Peninsula and Prince William Sound, and the humpback sometimes makes its appearance as far north as Baranof Island. Between Bristol Bay and Bering Strait a fair catch is sometimes taken, but most of the vessels forming what is termed the North Pacific whaling fleet now pass into the Arctic Ocean in quest of their prey. Probably not more than 8 or 10 of them are employed on the whaling grounds of the Alaskan coast.

In 1881 the whaling fleet of the North Pacific mustered only 30 and in the following year 40 craft, of which 4 were steamer. The catch for 1881 was one of the most profitable that has occurred since the date of the transfer, being valued at \$1,139,000, or an average of about \$57,000 for each vessel, some of them returning with cargoes worth \$75,000 and few with cargoes worth less than \$30,000. In 1883 the catch was inconsiderable, several of the whalers returning "clean," and few making a profit for their owners.

The threatened destruction of these fisheries is a matter that seems to deserve some attention. In 1850, as will be remembered, it was estimated that 300 whaling vessels visited Alaskan waters and the Okhotsk and Bering seas. Two years later the value of the catch of the North Pacific fleet was more than \$14,000,000.

After 1852 it gradually decreased until in 1862 it was less than \$800,000; for 1867 the amount was about \$3,200,000; in 1881 it had again fallen to \$1,139,000; and for the season of 1883 there was a still further reduction.

APPENDIX D.

DECREASE OF THE FOOD SUPPLY IN WESTERN ALASKA.

[From Petroff's census report, 1880.]

The whaling industry may be expected to decline gradually here as it has done in other sections of the globe. The danger indicated lies in the fact that the trading vessels coming to this region, chiefly from the Sandwich Islands, have carried such quantities of alcoholic liquor that the natives have acquired a craving for the same that can no longer be subdued, and this causes them to look for no other equivalent for their furs, oil, and ivory than the means of intoxication. At the same time they become utterly reckless in their pursuit of fur-bearing and other animals, thinking only of satisfying their desire for the present without the slightest thought of the future; and if this state of affairs be continued the extermination of the people, consequent upon the exhaustion of their means of subsistence, can only be a question of time.

APPENDIX E.

CATCH OF WHALES IN ALASKAN WATERS.

[From Senate Ex. Doc. No. 34, Forty-second Congress, second session, pages 4 and 5.]

Year.	Number of ships.	Average barrels.	Total catch, oil, sperm and whale.	Total value, including bone.
			<i>Barrels.</i>	
1845.....	163	953	250,600	\$5,337,780
1846.....	192	869	253,800	5,542,990
1847.....	177	1,059	187,443	4,519,330
1848.....	159	1,164	185,256	4,198,637
1849.....	155	1,334	206,850	5,085,716
1850.....	144	1,692	243,648	7,186,549
1851.....	138	626	86,360	2,812,350
1852.....	278	1,343	373,450	14,118,900
1853.....	238	912	218,135	7,264,470
1854.....	232	794	184,063	6,506,976
1855.....	217	873	189,579	8,038,914
1856.....	178	822	146,410	6,651,156
1857.....	143	796	113,900	5,158,760
1858.....	196	620	121,650	4,625,620
1859.....	176	535	94,160	3,459,660
1860.....	121	518	62,678	2,297,511
1861.....	76	724	55,024	1,792,900
1862.....	32	610	19,525	785,217
1863.....	42	857	36,010	1,855,770
1864.....	68	522	35,490	2,725,612
1865.....	59	617	36,415	3,092,160
1866.....	95	598	56,925	4,301,250
1867.....	90	640	57,620	3,192,380
1885.....	.....	.....	20,817	.....
1889.....	49	.....	12,231	.....
1890.....	48	.....	7,452	.....

APPENDIX F.

REINDEER.

[From Encyclopedia Britannica, volume 7, pages 24 and 25.]

The reindeer (*Tarandus rangifer*), the only domesticated species of deer, has a range somewhat similar to the elk, extending over the entire boreal region of both hemispheres, from Greenland and Spitzbergen in the north to New Brunswick in the south. There are several well-marked varieties differing greatly in size and in form of the antlers—the largest forms occurring farthest north, while by many writers the American reindeer, which has never been domesticated, is regarded as a distinct species. The antlers, which are long and branching and considerably palmated, are present in both sexes, although in the female they are slender and less branched than in the males. In the latter they appear at a much earlier age than in any other species of deer, and Darwin conjectures that in this circumstance a key to their exceptional appearance in the female may be found. The reindeer has long been domesticated in Scandinavia, and is of indispensable importance to the Lapland race, to whom it serves at once as a substitute for the horse, cow, sheep, and goat. As a beast of burden it is capable of drawing a weight of 300 pounds, while its fleetness and endurance are still more remarkable. Harnessed to a sledge it will travel without difficulty 100 miles a day over the frozen snow, its broad and deeply cleft

hoofs being admirably adapted for traveling over such a surface. During summer the Lapland reindeer feeds chiefly on the young shoots of the willow and birch; and as this season migration to the coast seems necessary to the well-being of the species, the Laplander, with his family and herds, sojourns for several months in the neighborhood of the sea. In winter its food consists chiefly of the reindeer moss and other lichens, which it makes use of its hoofs in seeking for beneath the snow. The wild reindeer grows to a much greater size than the tame breed, but in northern Europe the former are being gradually reduced through the natives entrapping and domesticating them. The tame breed found in northern Asia is much larger than the Lapland form and is there used to ride on. There are two distinct varieties of the American reindeer, the barren-ground caribou and the woodland caribou. The former, which is larger and more widely distributed of the two, frequents in summer the shores of the Arctic Sea, retiring to the woods in autumn to feed on the tree and other lichens. The latter occupies a very limited tract of woodland country, and, unlike the barren-ground form, migrates southward in spring. The American reindeer travel in great herds, and being both unsuspicious and curious, they fall ready victims to the bow and arrow or the cunning snare of the Indian, to whom their carcasses form the chief source of food, clothing, tents, and tools.

APPENDIX G.

WILD REINDEER IN ALASKA.

[Charles H. Townsend, in the report of the cruise of the United States Revenue-Marine steamer *Corwin*, 1885, Capt. M. A. Healy, commanding, pages 87 and 88.]

Reindeer are found more or less regularly throughout Alaska. They were found by Mr. McLenegan on the Noatak, as well as by our party on the Kowak. Traders in the service of the Alaska Commercial Company told me of their common distribution over the Yukon, Kuskokwim, and Aleutian divisions of the country. They have even been shot on Ounimak Island, at the end of the peninsula. But reindeer are restless animals, irregular in their migrations and habits. Sometimes they desert whole sections of the country for months together, and they appear to have withdrawn from many regions where firearms have been introduced. Notwithstanding the fact that large herds of reindeer are kept in a state of domestication by the Chukchees at East Cape and other well-known places on the Asiatic side of Bering Straits, with whom the natives of the Alaskan side communicate regularly, there appears to be no domestication of the species whatever in Alaska, nor indeed in any part of North America.

In time, when the general use of firearms by the natives of upper Alaska shall have reduced the numbers of this wary animal, the introduction of the tame variety, which is a substantial support to the people just across the straits, among our own thriftless, alcohol-bewitched Eskimos, would be a philanthropic movement, contributing more toward their amelioration than any system of schools or kindred charities. The native boats could never accomplish the importation, which would, however, present no difficulty to ordinary seagoing vessels. The taming of the American reindeer is impracticable; for domestication, with this animal at least, is the result of subjection through many generations. Something tending to render a wild people pastoral or agricultural ought to be the first step toward their advancement. In our management of these people, "purchased from the Russians," we have an opportunity to atone, in a measure, for a century of dishonorable treatment of the Indian.

APPENDIX H.

DOMESTIC REINDEER IN LAPLAND.

[From Du Chaillu's *Land of the Midnight Sun*, volume 2, pages 167 and 168.]

The Fjeld Lapp's time is engaged in adding to his herd, to which he and his family devote all their energies, for their welfare depends on the growth of the animals. It is difficult to ascertain exactly the increase or decrease of reindeer according to the districts, for the people often change, and there has been of late years in the north a large immigration of Norwegian Lapps to the territory of Sweden, especially to Keresuando, but taken as a whole the population and the reindeer are increasing. There is a greater number in Norway than in Sweden, owing to the number of stationary bonder (farmer) and sea Lapps, which far outnumber the nomads. According to the late census there are:

In Sweden (1870) 6,702 Laplanders, with 220,800 reindeer; in Norway (1865) 17,178 Laplanders, with 101,768 reindeer; in Finland (1865) 615 Laplanders, with 40,200 reindeer; in Russia (1859) 2,207 Laplanders, with 4,200 reindeer.

With those that belong to farmers and others I think we may safely say that the reindeer number about 400,000. The Samoides have the largest and finest breeds, which are not numbered among those of the Lapps. In Kautokeino there are Lapps who own 2,000 reindeer; in Sorsele, in Sweden, one is said to own 5,000, and others 1,000 and 2,000. Some of the forest Lapps have 1,000. In Lulea Lappmark there are herds of over 2,000; in Finmarken, of 5,000; and some Lapps have owned as many as 10,000. A herd of 2,000 to 2,500 is said to give about 200 to 250 calves yearly.

Every owner has his own mark branded upon the ears of all his reindeers, and no other person has a right to have the same, as this is the lawful proof of ownership; otherwise when several herds are mingled on the mountains the separation would be impossible. According to custom no one can make a new mark, but must buy that of an extinct herd. If these are scarce the price paid to the families that own them is often high. The name of the purchaser and each mark have to be recorded in court, like those of any other owner and property. The tax paid is according to the pasture land occupied.

APPENDIX J.

JOINT RESOLUTION TO EXTEND TO ALASKA THE BENEFIT OF THE LAWS ENCOURAGING IN THE SEVERAL STATES AND TERRITORIES INSTRUCTION IN AGRICULTURE AND THE MECHANIC ARTS.

Whereas Congress passed an act, approved March second, eighteen hundred and eighty-seven, entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July second, eighteen hundred and sixty-two, and of the acts supplementary thereto," and an act approved August thirtieth, eighteen hundred and ninety, entitled "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of Congress approved July second, eighteen hundred and sixty-two;" and

Whereas these several acts require the assent of the legislature of the State or Territory before their provisions become available; and

Whereas Alaska has no legislature, and on that account Congress has committed the charge of education in that section to the Secretary of the Interior: Therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is hereby authorized and empowered to extend to Alaska the benefits of the above-cited acts, and to receive and disburse through the Bureau of Education for the benefit of the said Territory all moneys now or hereafter appropriated under said acts.

APPENDIX K.

SAN FRANCISCO, *December 18, 1890.*

DR. SHELTON JACKSON, *Washington, D. C.*

DEAR SIR: Referring to your desire to obtain information relative to the introduction of reindeer into the northwest portion of the Territory of Alaska, I would say that in my opinion the project is entirely feasible. My experience in Alaska permits me to state on authority that the next decade will witness the extinction of the American reindeer, or rather caribou. In 1881, when I first visited the district of Norton and Kotzebue sounds and the lower Yukon, deer were plentiful. This past winter (1889) not a single animal had been seen within a radius of 200 miles. Similar conditions are coexisting from Port Clarence to Point Barrow, and where in former years the hunters had to travel but 50 miles to reach the deer haunts to-day they traverse twice that distance. These contingencies arise from three causes:

1. The indiscriminate slaughter of young and old animals.
2. The use at the present day of improved weapons of the chase in lieu of the primitive bows, arrows and spears.
3. The conditions of wind prevailing at the seasons when the deer go to and from the coast. It must distinctly be understood that upon a supply of these animals our Alaskan Eskimo depend for clothing, as well as their store of meat, should their pelagic sources of provender fail.

The proposition to introduce deer from the Siberian herds can be effected at a cost of but a few thousand dollars.

The location for the first experimental station should be on Choris Peninsula or the vicinity of Kotzebue Sound. This location has climatic similarities with Siberia. The food (moss) supply is abundant and herding easy.

As the results of this initial experiment become manifest additional locations for herds can be established. Within two seasons the Chukchee herdsmen will be able to instruct the Eskimo in the style of herding.

I have made inquiries upon the subject and now give you the result. Ten years ago the Russian steamer *Alexander* went to the Kamchatka Peninsula, and officers of the Alaska Commercial Company bought 7 male and 7 female deer, transporting them to Bering Island (one of the islands leased by the company from Russia). Captains Blair and Greenberg and Superintendent Lubeogoff inform me that the herd now numbers 180. From this you can judge the rate of propagation.

The revenue steamer *Bear* can be utilized for transportation, and I know no man more capable of conducting the experiment than Captain Healy.

I hope that the small sum required will be voted by Congress as, unless something is done for these people, their annihilation is only a question of a brief period.

The whales have so frightened the big fish that the natives are unable to pursue them in their rapid passage, while the extermination of the walrus is almost a fact.

These remarks I present as requested.

Yours, very truly,

HENRY D. WOOLFE.

II.—REPORT ON INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA, 1892.^a

By Sheldon Jackson, General Agent of Education in Alaska.

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, January 9, 1893.

SIR: In compliance with a resolution of the Senate passed January 6, 1893, directing that the Commissioner of Education transmit to the Senate a copy of the latest report of Dr. Sheldon Jackson on the introduction of domesticated reindeer into Alaska, I have the honor to transmit said report herewith.

Very respectfully,

W. T. HARRIS,
Commissioner.

The PRESIDENT OF THE SENATE.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., January 2, 1893.

SIR: So many inquiries have been made since my return from Alaska concerning the present progress of the plan to introduce domesticated reindeer into Alaska that it seems expedient to make a special report on that branch of the work of the office without waiting for the regular annual report on education in Alaska.

I have the honor, therefore, to submit the following report of progress on the introduction of domesticated reindeer into Alaska:

In the summer of 1890, in accordance with your instructions, I visited northern Alaska and established schools for the arctic Eskimo at Cape Prince of Wales, Point Hope, and Point Barrow. Through the courtesy of the Secretary of the Treasury and of Capt. L. G. Shepard, Chief of the Revenue Marine Division of the Treasury Department, I was permitted to accompany the U. S. Revenue Marine steamer *Bear*, Capt. M. A. Healy, commanding, on her annual cruise in Bering Sea and the Arctic Ocean.

In addition to conveying me to the points designated, Captain Healy was under instructions from the Secretary of the Treasury to visit the coast of Siberia, and distribute presents to the Koraks around Cape Navarin in return for shelter and food furnished shipwrecked American whalers. He was also under commission from Superintendent Porter, of the Census Office to take a census of the native population along the Arctic coast of Alaska and the islands of Bering Sea, which population could not be reached by the usual enumerators.

The trip to Siberia enabled me to make a cruise of 700 miles along that little known coast, and study somewhat the character of the native population under conditions corresponding with those under which life must be maintained in Alaska. I found them to be a hardy, active, and well-fed people, owning tens of thousands of head of domestic reindeer.

^a Reprint of Senate Mis. Doc. No. 22, Fifty-second Congress, second session, omitting maps and illustrations.

The taking of the census of arctic Alaska furnished me even more extensive facilities for studying the condition of the Eskimo of Alaska. I found them, like their neighbors on the Siberian side, to be a hardy and active people, but because they had never been instructed to depend upon the raising of reindeer as a support, unlike the Siberians, they were on the verge of starvation. The whale and walrus that formerly had constituted the principal portion of their food have been destroyed or driven off by the whalers; and the wild reindeer that once abounded in their country have been killed off by the introduction of breech-loading firearms.

The thorough canvass of the native population for enumeration, necessitating a landing wherever even one or two tents were seen on the beach, furnished unusual opportunities for observing the educational needs of that people and learning the great difficulties under which schools will have to be carried on.

Upon my return to Washington I had the honor, on November 12, to address you a preliminary report of the season's work, emphasizing the destitute condition of the Alaskan Eskimo.

On the 5th of December this report was transmitted by you to the Secretary of the Interior for his information, and on the 15th transmitted to the Senate by Hon. George Chandler, Acting Secretary of the Interior. On the following day it was referred by the Senate to the Committee on Education and Labor.

On the 19th of December, Hon. Louis E. McComas, of Maryland, introduced into the House of Representatives a joint resolution (H. R. No. 258) providing that the act of Congress approved March 2, 1887, "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto," and an act approved August 30, 1880, entitled "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of Congress approved July 2, 1862," should be extended by the Secretary of the Interior over Alaska, with the expectation that the purchase, improvement, and management of domestic reindeer should be made a part of the industrial education of the proposed college.

The resolution was referred to the Committee on Education, and on the 9th of January, 1891, reported back to the House of Representatives for passage. (See Appendix A.)

It was, however, so near the close of the short term of Congress that the resolution was not reached.

When it became apparent that it would not be reached in the usual way, the Hon. Henry M. Teller, on the 26th of February, moved an amendment to the bill (H. R. No. 13462), making appropriations for sundry civil expenses of the Government for the year ending June 30, 1892, appropriating \$15,000 for the introduction of domestic reindeer into Alaska, which was carried. The appropriation failed to receive the concurrence of the conference committee of the House of Representatives.

Upon the failure of the Fifty-first Congress to take action, and deprecating the delay of twelve months before another attempt could be made, with your approval I made an appeal in the Mail and Express of New York City, the Boston Transcript, the Philadelphia Ledger, the Chicago Inter-Ocean, and Washington Star, as well as in a number of the leading religious newspapers of the country, for contributions to this object. The response was prompt and generous; \$2,146 were received. (Appendix B.)

As the season had arrived for the usual visit of inspection and supervision of the schools in Alaska, you were kind enough to direct that in addition to my regular work for the schools, I should continue in charge of the work of transporting domesticated reindeer from Siberia to Alaska. As the natives of Siberia, who own the reindeer, know nothing of the use of money, an assortment of goods for the purpose of barter for the reindeer was procured from the funds so generously contributed by benevolent people in answer to the appeal through the newspapers.

The honorable the Secretary of the Treasury issued instructions to Captain Healy to furnish me every possible facility for the purchase and transportation of reindeer from Siberia to Alaska. The honorable the Secretary of State secured from the Russian Government instructions to their officers on the Siberian coast, also, to render what assistance they could, and on May 25, 1892, I again took passage on the revenue cutter *Bear*, Captain Healy in command, for the coast of Siberia.

The proposition to introduce domesticated reindeer into Alaska had excited widespread and general interest. In the public discussions which arose with regard to the scheme a sentiment was found in some circles that it was impracticable; that on account of the superstitions of the natives they would be unwilling to sell their stock alive; further, that the nature of the reindeer was such that he would not bear ship transportation, and also that even if they could be purchased and safely transported the native dogs on the Alaskan coast would destroy or the natives kill them for food. This feeling, which was held by many intelligent white men (Appendix C), was asserted so strongly and positively that it was thought best the first season to make haste slowly, and instead of purchasing a large number of reindeer to possibly die on shipboard, or perhaps to be destroyed by the Alaskan dogs (thus at the very outset prejudicing the scheme), it was deemed wiser and safer to buy only a few.

Therefore, in the time available from other educational duties during the season of 1891, it seemed important that I should again carefully review the ground and secure all possible additional information with regard to the reindeer, and, while delaying the actual establishment of a herd until another season, that I should determine the correctness of the objections that the natives would not sell and the deer would not bear transportation by actually purchasing and transporting them.

The work was so new and untried that many things could only be found out by actual experience.

First. The wild deermen of Siberia are a very superstitious people, and need to be approached with great wisdom and tact.

Upon one occasion, when Captain Healy purchased a few reindeer for food, the following ceremonies were observed: When getting ready to lasso the deer the owner's family seated themselves in a circle on the ground, where probably some rites connected with their superstitions were observed. Upon attempting to approach the circle, I was motioned away. After a short time the men went out and lassoed a selected animal, which was led to one side of the herd. The man that was leading him stationed himself directly in front of the animal and held him firmly by the two horns. Another with a butcher knife stood at the side of the deer. An old man, probably the owner, went off to the eastward, and placing his back to the setting sun seemed engaged in prayer, upon the conclusion of which he turned around and faced the deer. This was the signal for knifing the animal. With apparently no effort, the knife was pushed to the heart and withdrawn. The animal seemed to suffer no pain, and in a few seconds sank to his knees and rolled over on his side. While this was taking place the old man before mentioned stood erect and motionless, with his hand over his eyes. When the deer was dead he approached, and taking a handful of hair and blood from the wound, impressively threw it to the eastward. This was repeated a second time. Upon the killing of the second animal, the wife of the owner cast the hair and blood to the eastward.

Since then I have often observed the man who was selling a deer pluck some hair from the deer and put it in his pocket or throw it to the winds for good luck.

If a man should sell us deer, and the following winter an epidemic break out in his herd, or some calamity befall his family, the Shamans would make him believe that his bad luck was all due to the sale of the deer.

Second. The Siberian deermen are a nonprogressive people. They have lived for ages outside of the activities and progress of the world. As the fathers did, so continue to do their children.

Now they have never before been asked to sell their deer; it is a new thing to them, and they do not know what to make of it. They were suspicious of our designs. And in reference to this state of mind I have found that being on a Government vessel has been of great assistance. It impresses the natives with confidence that they will be treated honorably and justly. This moral effect was so great that we secured results that otherwise could not have been obtained so easily.

Then Captain Healy, commander of the *Bear*, is well known for thousands of miles on both sides of the coast, and the natives have confidence in him. With a stranger in command I am confident that but little would have been accomplished in the summer of 1891.

Purchasing reindeer in Siberia is very different from going to Texas and buying a herd of cattle. In Texas such a sale could be consummated in a few minutes or hours. But in Siberia it takes both time and patience.

Upon the anchoring of the ship in the vicinity of a settlement the natives flock aboard, bringing skins and furs to exchange for flour, cotton cloth, powder, lead, etc.

Once aboard they expect to be fed by the captain, and bucket after bucket of hard bread is distributed among them. They know perfectly well that we are after reindeer, but nothing is said about it. They have to be feasted first. They are never in a hurry, and therefore do not see why we should be.

After a little small presents are judiciously given to the wife or child of a leading man, and when everyone is in good humor a few of the leaders are taken into the pilot house and the main subject is opened. After much discussion and talking all around the subject one man is ready to sell twenty and another perhaps only two. After all is arranged the leading men send their servants off after the deer, which may be in the vicinity or four or five days' journey away. Sometimes these delays consume a week or more at a place.

Another difficulty arises from the fact that they can not understand what we want of the reindeer. They have no knowledge of such a motive as doing good to others without pay.

As a rule the men with the largest herds, who can best afford to sell, are inland and difficult to reach.

Then business selfishness comes in. The introduction of the reindeer on the American side may to some extent injuriously affect their trade in deerskins. From time immemorial they have been accustomed to take their skins to Alaska and exchange them for oil. To establish herds in Alaska will, they fear, ruin this business.

Another difficulty experienced was the impossibility of securing a competent interpreter.

A few of the natives of the Siberian coast have spent one or more seasons on a whaler, and thus picked up a very little English. And upon this class we have been dependent in the past.

It is very desirable that a native young man should be secured and trained as an interpreter who could be employed regularly, year after year.

However, notwithstanding all these difficulties and delays, Captain Healy with the *Bear* coasted from 1,200 to 1,500 miles, calling at the various villages and holding conferences with the leading reindeer owners on the Siberian coast. Arrangements were made for the purchase of animals the following season. Then, to answer the question whether reindeer could be purchased and transported alive, sixteen were purchased, kept on shipboard for some three weeks, passing through a gale so severe that the ship had to "lie to," and finally landed in good condition at Amaknak Island, in the harbor of Unalaska, having had a sea voyage of over 1,000 miles.

Thus the results of investigations for 1891 were:

First. The cultivation of the good will of the Siberians.

Second. The actual purchase of sixteen head of reindeer.

Third. That reindeer can be transported with the same facility as other domestic cattle, they being safely loaded, kept on shipboard for three weeks, and landed in good condition a thousand miles away.

Upon my return to Washington in the fall of 1891 the question was again urged upon the attention of Congress, and on the 17th of December, 1891, Hon. H. M. Teller introduced a bill (S. 1109) appropriating \$15,000, to be expended under the direction of the Secretary of the Interior, for the purpose of introducing and maintaining in the Territory of Alaska reindeer for domestic purposes. This bill was referred to the Committee on Agriculture and Forestry, Hon. Algernon S. Paddock, chairman. The committee took favorable action and the bill was passed by the Senate on May 23, 1892. On the following day it was reported to the House of Representatives and referred to the Committee on Appropriations. A similar bill (H. R. 7764) was introduced into the House of Representatives by Hon. A. C. Durborow and referred to the Committee on Agriculture.

On April 15, Hon. S. B. Alexander, of North Carolina, reported the bill to the House of Representatives with the approval of the Committee of Agriculture. (Appendix D.) The bill was placed on the calendar.

On the 2d day of May, 1892, I started for my third summer's work on the coast of Siberia and arctic Alaska in the U. S. S. *Bear*, Capt. M. A. Healy commanding.

In accordance with your instructions, all the time that could be spared from the schools was given to the establishment of the experimental reindeer station.

Upon reaching Unalaska, May 22, I was much encouraged to learn that the reindeer left last fall on Amaknak and Unalaska islands had wintered successfully and were in good condition with an increase of two.

We reached Cape Navarin, Siberia, on the 6th of June, and proceeding north called at various points on the coast. Our progress was greatly hindered by heavy fields of ice. The good ship had two anchors ground up and one of the blades of the propeller broken off by the ice. Upon several occasions we were so surrounded that the propeller was stopped and the ship moored to the ice. A less stanch vessel would have been unable to stand the strain. However, during the season, five trips were made to Siberia, and 175 reindeer purchased, brought over, and landed at the head of Point Clarence, which, being the nearest good harbor to Asia on the American side and a central point for the distribution of deer, I had selected, June 29, as the location of the first reindeer station.

The first installment of deer, numbering fifty-three, was landed at the new station at 6 o'clock on the morning of the 4th of July.

Mr. Miner W. Bruce, of Nebraska, was appointed superintendent of the station and herd, with Mr. Bruce Gibson, of California, as his assistant. (Appendix H.)

Upon the establishment of the experimental reindeer herd at Port Clarence, it became important to gain information concerning the surrounding country.

To secure full and reliable information with reference to pasturage in the vicinity of Bering Straits, I had the previous season employed Mr. W. T. Lopp, teacher at Cape Prince of Wales, to make two trips northward along the coast in midwinter (1891-92), when the moss might be expected to be covered with ice and snow (see Appendix E), and in the fall of 1892 sent Mr. Bruce Gibson, assistant superintendent of the reindeer station, with a party of natives, to the northward of Port Clarence (see Appendix F), and a few weeks later Mr. Miner W. Bruce, superintendent of the station (see Appendix G).

These several reconnaissances proved both the abundance of moss and its accessibility for winter pasturage to the new station.

A comfortable house, 20 by 60 feet, was erected as a residence for the superintendent and his assistant, and also for the storing of the annual supply of provisions and barter goods.

Close to the main house two comfortable dugouts were built for the use of the herders. Four Siberians, well acquainted with the management of reindeer, were brought over and placed in charge of the herd. With the Siberians were placed a few young men from the Alaskan Eskimo, who are expected to learn the management and care of the herd. The present expectation is to increase the number of Alaskan boys, who shall become apprentices to the herders, and when they have sufficiently learned the business and proved their capability to take care of reindeer a small herd will be given each one as his start in life.

As from year to year the number of such young men is increased and a number of the natives become herders, the herds will naturally become more and more distributed throughout the country, until, eventually, that whole northern region shall be covered with them, as the similar regions of Siberia and Lapland are now covered. (Appendix J.)

With the accomplishment of this result several important objects will be attained.

PERMANENT FOOD SUPPLY.

In the first place, the population, which is now upon the verge of starvation, will be furnished with a permanent, regular, and abundant supply of food. As has already been stated, the native supply of food in that region has been destroyed by the industries of the white men. (Appendix K.) The whale and the walrus that once teemed in their waters and furnished over half their food supply have been killed or driven off by the persistent hunting of the whalers. The wild reindeer (caribou) and fur-bearing animals of the land, which also furnished them food and clothing, are largely being destroyed by the deadly breech-loading firearm. It will be impossible to restock their waters with whale and walrus in the same way that we restock rivers with a fresh supply of fish. But what we can not do in the way of giving them their former food, we can, through the introduction of the domestic reindeer, provide a new food supply.

Upon our return southward from the Arctic Ocean in the fall of 1891 Captain Healy providentially called at the village on King Island, where we found the population starving. The appeal for food was so pressing that the captain detailed a lieutenant to make a thorough examination of the village and invited me to accompany him. In a few houses we found that the families in their great distress had killed their sled dogs to keep themselves from starving. In the larger number of families they were making a broth of seaweed, their only food supply. In all human probability, if the ship had not learned their condition, the following summer not a man, woman, or child would have been left alive to tell the story. A few years ago the same thing happened to three large villages on the Island of St. Lawrence, and when, the following season, the revenue cutter called at the village, the putrefying corpses of the population were found everywhere—on the bed platforms, on the floors, in the doorways, and along the paths, wherever death overtook them.

At King Island, having ascertained the condition of things, a purse was made up from the officers and a few others on board the ship, and the captain steamed some 200 miles to the nearest trading post and purchased all the provisions that could be obtained, which were taken back to the starving village. This supply sustained the population alive until seal and walrus came, some months later, around the village. The movement of the seal and walrus, since their numbers have become greatly diminished, is so uncertain that while a village may have plenty to eat one season they will be on the verge of starvation another.

In the winter of 1890-91 there was a sufficiency of food at Point Hope. In the winter of 1891-92 the same population had to leave their village and make their way, in some instances hundreds of miles, to other villages to keep from starving. In 1891 one of the teachers on the Kuskokwim River wrote me that the inhabitants of that valley had had but little opportunity during the summer of 1890 to provide a sufficient food supply of fish, that consequently starvation faced them all winter, and that it was with great difficulty that they survived until the fish returned the following season. A teacher on the Yukon River reported this past summer that some of the natives to the north of him had starved to death. This same scarcity of food exists across the entire northern portion of North America, so that now, under the auspices of the Church of England, subscriptions have been opened in London for a famine fund, out of which to send relief to the starving Eskimo of Arctic British America. This condition of things will go on, increasing in severity from year to year, until the food supply of the seas and of the land is entirely gone, and then there is nothing left but the extermination of the native population. The general introduction of the domestic reindeer alone will change this entire condition of things, and furnish as reliable supply of food to that people as the herds of cattle in Texas and Wyo-

ming do their owners or the herds of sheep in New Mexico and Arizona. The reindeer is the animal which God's providence seems to have provided for those northern regions, being food, clothing, house, furniture, implements, and transportation to the people. Its milk and flesh furnish food. Its marrow, tongue, and hams are considered choice delicacies. Its blood, mixed with the contents of its stomach, forms a favorite native dish. Its intestines are cleaned, filled with tallow, and eaten as sausage. Its skin is made into clothes, bedding, tent covers, reindeer harness, ropes, cords, and fish lines. The hard skin of the fore legs makes an excellent covering for snowshoes. Its sinews are made into a strong and lasting thread. Its bones are soaked in seal oil and burned for fuel. Its horns are made into various kinds of household implements, into weapons for hunting, fishing, or war, and in the manufacture of sleds. Then the living animal is trained for riding and dragging of sleds. The general introduction of such an animal into that region will arrest the present starvation and restock that vast country with a permanent food supply. It will revive hope in the hearts of a sturdy race that is now rapidly passing away. Surely the country that sends shiploads of grain to starving Russians, that has never turned a deaf ear to the call of distress in any section of the globe, will not begrudge a few thousand dollars for the purchase and introduction of this Siberian reindeer and the rescue of thousands of people from starvation.

REPEOPLING THE COUNTRY.

In the second place, the introduction of domestic reindeer into Alaska will not only thus arrest the present starvation but will assist in increasing the population. With a more generous food supply this population will commence to increase in numbers. Occupying a region whose climatic conditions are so rigorous that but few white men will ever be willing to make their permanent home in it, it is important, if we would save it from being an unpeopled waste and howling wilderness, that we build up the people who through generations have become acclimated and who are as fervently attached to their bleak and storm-swept plains as the people of temperate and torrid zones to their lands of comfort and abundance.

They are a race worth saving. I find that public opinion, gained perhaps by a more familiar knowledge of the Eskimo of Greenland and Labrador, conceives of the Alaska Eskimos as of the same small type. But this is not true.

In the extreme north, at Point Barrow, and along the coast of Bering Sea they are of medium size. At Point Barrow the average height of the males is 5 feet 3 inches, and average weight 153 pounds; of the women, 4 feet 11 inches, and weight 135. On the Nushagak River the average weight of the men is from 150 to 167 pounds. From Cape Prince of Wales to Icy Cape and on the great inland rivers emptying into the Arctic Ocean they are a large race, many of them being 6 feet and over in height. At Kotzebue Sound I have met a number of men and women 6 feet tall. Physically they are very strong, with great powers of endurance. When on a journey, if food is scarce, they will travel 30 to 40 miles without breaking their fast. Lieutenant Cantwell, in his explorations of the Kowak River, makes record that upon one occasion when he wanted a heavy stone for an anchor a woman went out and alone loaded into her birch-bark canoe and brought him a stone that would weigh 800 pounds. It took two strong men to lift it out of the canoe.

Another explorer speaks of a woman carrying off on her shoulder a box of lead weighing 280 pounds. This summer, in erecting the school buildings in the Arctics, there being no drays or horses in that country, all the timbers, lumber, hardware, etc., had to be carried from the beach to the site of the house on the shoulders of the people. They pride themselves on their ability to outjump or outrun any of our race who have competed with them. They can lift a heavier weight, throw a heavy weight farther, and endure more than we. They are a strong, vigorous race, fitted for peopling and subduing the frozen regions of their home.

Arctic and subarctic Alaska cover an empire in extent equal to nearly all Europe. With the covering of those vast plains with herds of domesticated reindeer it will be possible to support in comparative comfort a population of 100,000 people where now 20,000 people have a precarious support. To bring this about is worthy the fostering care of the General Government.

CIVILIZATION OF THE ESKIMOS.

Thirdly, the introduction of domestic reindeer is the commencement of the elevation of this race from barbarism to civilization. A change from the condition of hunters to that of herders is a long step upwards in the scale of civilization, teaching them to provide for the future by new methods.

Probably no greater returns can be found in this country from the expenditure of the same amount of money than in lifting up this native race out of barbarism by the introduction of reindeer and education.

ARCTIC TRANSPORTATION.

Fourthly, the introduction of the domestic reindeer will solve the question of arctic transportation. (Appendix L.) The present transportation of that region is by dog sleds. One load of supplies for the trader or traveler requires a second load of food for the two teams of dogs, and they make but short distances per day. This difficulty of transportation has been one great drawback to the development of the country. It has interfered with the plans of the fur trader; it has interfered with Government exploration. Only three years ago, when the United States Coast and Geodetic Survey sent two parties to determine the international boundary between Alaska and British America, the small steamer that was conveying the supplies up the Yukon River was wrecked, and it was with the utmost difficulty that the surveying parties were kept from starvation because of the difficulty of sending sufficient food 2,000 miles along that great valley by dog sleds. If reindeer had been introduced into the country there would have been no such difficulty in furnishing food. Bills have been before Congress for several years proposing to establish a military post in the Yukon Valley. If such a post is established it is not at all improbable that a combination of circumstances may arise some winter by which the forces that shall be stationed there will be reduced to starvation, unless reindeer transportation shall have become so systematized that food can readily be sent in from other regions. The same is true with reference to the Government officials whom it may be found necessary to station in that region.

The same is true of the forty or more missionaries and their families that are now scattered through that vast region; also of the teachers and their families whom the Government has sent into that country.

These are now separated from all communication with the outside world, receiving their mail but once a year. With reindeer transportation they could have a monthly mail.

During the past three years the whalers have been extending their voyages east of Point Barrow to the mouth of the Mackenzie River, and wintering at Herschel Island. To the owners of this property it would be worth tens of thousands of dollars if they could hear from their vessels in the winter before new supplies and additional vessels are sent out in the spring. But this can not now be done. Last winter letters were sent out from the field, overland, by Indian runners that ascended the Mackenzie, crossed over to the Porcupine, and descended the Porcupine and Yukon rivers down to St. Michael, on the coast. It was ten months before those letters reached their destination. It was a great satisfaction to the owners to hear of the welfare of their ships and crews, but the news was too late for business purposes. Millions of dollars' worth of property and thousands of lives are involved in the whaling business. With the introduction of domestic reindeer into that region it will be both feasible and perfectly practicable to establish a reindeer express during the winter from the Arctic coast down to the North Pacific coast of Alaska.

The southern coast of Alaska on the Pacific Ocean never freezes, and is accessible all the year around to vessels from San Francisco or Puget Sound.

A reindeer express across Alaska, from the Arctic to the Pacific Ocean, would have a corresponding commercial value to that section as the telegraph between New York and London to theirs. It would enable the owners of the whaling fleet to avail themselves of the latest commercial news and keep a more perfect control over their business.

COMMERCIAL VALUE.

In the sixth place, the introduction of domesticated reindeer will add a new industry to that country, which will go to swell the aggregate of national wealth. Lapland sends to market about 22,000 head of reindeer a year, the surplus of her herds.

Through Norway and Sweden smoked reindeer meat and smoked reindeer tongues are everywhere found for sale in their markets, the hams being worth 10 cents a pound and the tongues 10 cents apiece. There are wealthy merchants in Stockholm whose specialty and entire trade is in these Lapland products. The reindeer skins are marketed all over Europe, being worth in their raw condition from \$1.50 to \$1.75 apiece. The tanned skins (soft, with a beautiful yellow color) find a ready sale in Sweden, at from \$2 to \$2.75 each. Reindeer skins are used for gloves, military riding trousers, and the binding of books. Reindeer hair is in great demand for the filling of life-saving apparatuses, buoys, etc., and from the reindeer horns is made the best existing glue. One great article, smoked reindeer tongues, and tanned skins are among the principal products of the great annual fair at Nizhni Novgorod, Russia. In Lapland there are about 400,000 head of reindeer, sustaining in comfort some 26,000 people. There is no reason, considering the greater area of the country and the abundance of reindeer moss, why arctic and subarctic Alaska should not sustain a population of 100,000 people with 2,000,000 head of reindeer. In Lapland the reindeer return a tax of \$1 a head to the Government, so that they yield an annual revenue to the Government of \$400,000.

With the destruction of the buffalo the material for cheap carriage and sleigh robes for common use is gone. Bear and wolf skins are too expensive, but with the introduction of the reindeer their skins would to a certain extent take the place of the extinct buffalo.

The commercial importance of introducing domesticated reindeer in Alaska was so manifest that shrewd business men on the Pacific coast at once appreciated the great possibilities involved, and hastened, through their chambers of commerce and boards of trade, to take action urging their several delegations in Congress to do what they could to secure an appropriation of money for these purposes. (Appendix N.)

Under favorable circumstances a swift reindeer can traverse 150 miles in a day. A speed of 100 miles per day is easily made. As a beast of burden they can draw a load of 300 pounds.

The progress of exploration, settlement, development, government, civilization, education, humanity, and religion are all largely dependent in that region on reindeer transportation.

If there is any measure of public policy better established than another or more frequently acted upon, it has been the earnest and unceasing efforts of Congress to encourage and aid in every way the improvement of stock, and the markets of the world have been searched for improved breeds. The same wise and liberal policy will make ample provision for the introduction of the reindeer, which of all animals is the most serviceable and indispensable to man in high northern latitudes.

If it is sound public policy to sink artesian wells or create large water reservoirs for reclaiming large areas of valuable land otherwise worthless; if it is the part of national wisdom to introduce large, permanent, and wealth-producing industries where none previously existed, then it is the part of national wisdom to cover that vast empire with herds of domestic reindeer, the only industry that can live and thrive in that region; and take a barbarian people, on the verge of starvation, lift them up to a comfortable support and civilization, and turn them from consumers into producers of national wealth.

It will be noticed that the sum asked from Congress is only \$15,000. I hope that this will not be misunderstood and taken as a measure of the importance of the movement, for

if the proposed results could not be obtained with any less sum an appropriation of hundreds of thousands of dollars would be both wise and economical.

But so small a sum is accepted on the ground of proceeding with extreme caution. It is the commencement of a great movement that will, if successful, extend its beneficial influences as long as the world stands. Therefore we move slowly and carefully at first in order to secure that success. Commencing in a small way, the first outlay of money is not large.

In 1891 the sixteen reindeer purchased averaged \$10.25 each. This last season the general average was brought down to \$5 each.

So far the purchase of the reindeer has been defrayed from the money contributed by benevolent individuals.

REVENUE-MARINE SERVICE.

These gratifying results, however, could not have been attained without the hearty and active cooperation of the Revenue-Marine Service.

If this office had been required to charter a vessel for the transporting of the reindeer nothing could have been done with the small sum at our disposal.

But the Secretary of the Treasury directed that the revenue-cutter *Bear*, in addition to her regular duties of patrolling the Seal Islands and the coasts of Bering Sea and the Arctic Ocean, following the whaling fleet and inspecting the Refuge Station at Point Barrow, should also give what time was possible to transporting the reindeer.

To the captain, officers, and crew of the *Bear* is due much praise for the hard work done by them.

Special thanks are due Capt. M. A. Healy for his earnestness and efficiency in doing his part of the work; also to Lieut. D. H. Jarvis, Surg. S. J. Call, and Assistant Engineer Falkenstein, who were in charge of much of the shore work of loading and unloading the deer.

ILLUSTRATIONS.

I have the honor of inclosing an excellent map, prepared through the courtesy of the U. S. Coast and Geodetic Survey, also several illustrations kindly loaned by The Californian, Scribner's, and Harper's.

Also a few other photographs taken by Surgeon Call and Assistant Engineer Broadbent, of the *Bear*.

The map and illustrations will greatly add to the interest of the report.

Hoping that Congress will provide the funds necessary for a further prosecution of the work, I remain, with great respect,

Yours, truly,

SHELDON JACKSON,
General Agent of Education in Alaska.

Hon. W. T. HARRIS,
Commissioner of Education.

APPENDIX A.

[House Report No. 3414, Fifty-first Congress, second session.]

Mr. McComas, from the Committee on Education, submitted the following report (to accompany H. Res. 258):

The Committee on Education reports favorably House Joint Resolution, 258 with sundry amendments recommended by the committee.

Congress has passed several acts encouraging the establishment of agricultural schools and experiment stations in the different States and Territories.

These several acts require the assent of the legislatures of the several States and Territories before their provisions become available; but as Alaska has no legislature, it is the only Territory which is unable to avail itself of the benefits and provisions of these acts.

This bill proposes to extend to Alaska the benefits and provisions of the agricultural acts through the Secretary of the Interior, in like manner to the other Territories. The acts are recited in the preamble to the joint resolution.

There has been very wide divergence of views with regard to the agricultural and horticultural capabilities of Alaska, or whether it has any agricultural capabilities at all.

This bill would secure the establishment of an experimental station in southern Alaska, which has a temperate climate, and test the question of what can and what can not be raised to advantage.

This would be of very great service, both to the natives, who, through the Government schools, are coming into our civilization, and to the white settlers who may locate in that vast region, which embraces about 580,000 square miles.

There are hundreds of thousands of square miles of area within the Arctic regions of Alaska that, there is no question, can never be adapted to ordinary agricultural pursuits, nor utilized for purposes of raising cattle, horses, or sheep; but this large area is especially adapted for the support of reindeer.

This bill will enable the Secretary of the Interior, through the Government industrial schools, to make the raising of reindeer the great industrial feature of that region.

This will utilize hundreds of thousands of square miles of territory; will build up a large and profitable industry; and, above all, will provide a comfortable support for the native population of that region.

This is the more important at the present time, because the American whalers have practically destroyed and driven out the whale and the walrus from the waters adjacent to the coast of Alaska.

The destruction of the whale and walrus has taken away three-fourths of the ordinary food supply of the Eskimo population, and that population to-day on the Arctic coast of Alaska is on the verge of starvation. The large canneries will soon take away the fish supply.

The introduction of tame reindeer from Siberia into Alaska thus has a twofold importance:

(1) As the establishment of a profitable industry.

(2) As a relief of a starving people—a relief that will become more and more valuable as the years roll round, a relief that once established perpetuates itself.

This project is wiser than to pauperize the people of Alaska.

The revenue from that country warrants this attempt to make these people self-sustaining.

The lease of the Seal Islands by the United States Treasury Department to the North American Commercial Company, on the basis of 100,000 skins, ought to yield a revenue of about \$1,000,000 annually. Under the old lease the revenue was \$317,500 annually.

The extending to Alaska of the benefits of the agricultural bill, approved August 30, 1890, would give for the year ending June—

1890.....	\$15,000
1891.....	16,000
1892.....	17,000
	<hr/> 48,000

From the act establishing agricultural experiment stations approved July 2, 1862, the sum of \$15,000. The joint resolution would therefore carry for the year ending June 30, 1892, \$93,000, and for the following year \$33,000.

The committee report therefore this joint resolution with the following amendments, and recommend that it pass:

In line 4, page 2, after the word "to," insert "give any assent required by either of said acts, and to."

In line 4, page 2, after the word "benefits," insert "and provisions."

In line 6, page 2, after "Territory," insert "of Alaska."

In line 7, page 2, after the word "acts," add "in like manner as for any other Territory."

APPENDIX B.

LIST OF CONTRIBUTIONS TO THE REINDEER FUND, 1891.

1891.		
May 15.	Miss H. S. Benson, Philadelphia.....	\$200.00
	John N. Brown, Providence, R. I.....	200.00
	Jane N. Grew, Boston.....	20.00
	Mary P. Gardner, New York.....	10.50
	Sarah B. Reynolds, Kingston, N. Y.....	10.00
	Mrs. H. B. Otis, Roxbury, Mass.....	10.00
	M. A. and S. H. Foster, Portsmouth, N. H.....	10.00
June 10.	Boston Transcript for various persons.....	289.00
	E. G. Read, Somerville, N. J.....	10.00
	Effe V. V. Knox, New York.....	10.00
	Mrs. N. Williamson, Brunswick, N. J.....	10.00
	E. E. B., 140 Lanvale street, Baltimore, Md.....	1.00
	Helen B. French, Beloit, Wis.....	10.00
	Mary Ellen Smith, Philadelphia, Pa.....	10.00
	Judge E. R. Hoar, Concord, Mass.....	10.00

1891.		
June 10.	C. H. Barstow, Crow Agency, Mont.....	\$15.00
	M. E. D., per Boston Transcript.....	1.00
	A. F. Allyn, Chelsea, Mass.....	1.00
	R. P. Wainwright, Asheville, N. C.....	10.00
	M. A. Haven and Annie W. Davis, Portsmouth, N. H.....	10.00
	Mary Hemingway, Boston, Mass.....	100.00
	The Mail and Express.....	500.00
	Mrs. William Thaw.....	50.00
	Five children in one family, one reindeer each.....	50.00
	Mrs. F. L. Achey.....	20.00
	M. E. P.....	50.00
	The young ladies of Rye Seminary, Rye, N. Y.....	50.00
	Mary L. Parsons.....	20.00
	Y. P. S. C. E., Reformed Church, Mount Vernon.....	13.65
	Three ladies of East Orange, N. J.....	12.00
	G. K. Harroun.....	10.00
	H. G. Ludlow.....	10.00
	Mrs. H. G. Ludlow.....	10.00
	Mrs. R. C. Crane.....	10.00
	Mrs. Edwin G. Benedict.....	10.00
	Mrs. M. C. Cobb.....	10.00
	E. M. Chadwick.....	10.00
	Augusta Moore.....	10.00
	Rev. Wm. T. Doubleday.....	10.00
	E. M. Eames.....	10.00
	Chas. H. Wells.....	10.00
	A. R. Slingshard.....	10.00
	James M. Ham.....	10.00
	Mrs. James M. Ham.....	10.00
	Mrs. Robert I. Brown.....	10.00
	William Rust.....	10.00
	Mrs. Levi S. Gates.....	10.00
	Bethlehem Chapel Mission School.....	10.00
	Mrs. Richard L. Allen.....	10.00
	Miss M. I. Allen.....	10.00
	E. Holman.....	10.00
	C. and family, East Orange, N. J.....	10.00
	J. Van Santwood.....	5.00
	James F. E. Little.....	5.00
	Frederick W. Stoneback.....	5.00
	J. H. Charles.....	5.00
	V. Thompson.....	5.00
	W. T. Bliss.....	5.00
	Howard Wilson.....	5.00
	G. H. Fleming.....	5.00
	W. S. Quigley.....	5.00
	J. Lantz.....	5.00
	From friends.....	2.60
	Mrs. L. E. Hastings.....	1.20
	A. E. Barnes.....	1.00
	Amelia J. Burt.....	1.00
	W. A. Deering.....	5.00
	L. F. Golding.....	5.00
	J. A. Hennessy.....	5.00
	R. H. Stoddard.....	5.00
	William R. Worrall.....	5.00
	H. W. Dourmett.....	5.05
	Betty Deming (a child).....	10.00
	John Deming (a child).....	10.00
	Anonymous.....	10.00
	Little Lights Society.....	5.00
	Mrs. Edmund T. Lukens.....	5.00
	W. S.....	5.00
	Cuttenden Hull, A.....	10.00
	Mrs. Clinton B. Fisk.....	10.00
	W. U. A.....	20.00

Of the above amount \$1,158 was collected through the Mail and Express, of New York.

The testimony showed that there are no reindeer in Alaska; that Alaska could support many times enough reindeer to furnish the inhabitants with food and clothing, and that the reindeer skins are indispensable for clothing; that the whale and walrus, the principal supply of food, have been destroyed to such an extent as to cause much suffering for food; that dogs are used for transportation, and in many places the supply of food is becoming so scarce that the natives are compelled to eat their dogs, thus depriving them of the means of hauling their supplies; that for the development of the country the domesticated reindeer is absolutely indispensable; that the domesticated reindeer can make a speed of 19 miles an hour, and that a fair average rate of speed is 12 miles per hour; and this means of transportation is necessary to develop the gold fields of the interior, which can only be worked from two to two and one-half months a year; that the reindeer would be distributed at the Government schools, the native youths taught to herd and raise them, the increase to be given to worthy students and native teachers for services rendered; that this will induce the natives to become herders, be self-supporting, and not a charge upon the Government; that the natives have no vessels that can transport the live reindeer from Siberia to Alaska; that the vessels from San Francisco to Alaska leave the 1st of May to the 1st of June, none later than the last date mentioned, and that if anything be done this year it is absolutely necessary to get the appropriation in time to send the goods for the purchase of the reindeer by the revenue cutter that leaves San Francisco the 1st of June.

The description given by the missionaries and others of the country, the habits of the natives, etc., was interesting. The distress caused by the continued failure of the food supply shows plainly that the natives will not be able to sustain themselves, and will become a charge upon the Government. For these and other reasons the Committee on Agriculture urge the passage of this bill.

APPENDIX E.

MR. W. T. LOPP'S RECONNOISSANCE ALONG THE COAST NORTH OF BERING STRAITS.

CAPE PRINCE OF WALES, ALASKA, *January 20, 1892.*

DEAR SIR: According to your instructions, I have made two expeditions up the coast north of here, and submit you the following report:

In November employed Eskimo, dogs, and sled, and explored west shore of Louge Inlet or Lake, just north of Cape Prince of Wales, up to its head, where Grouse River empties into it. The mountains (see chart inclosed) were sloping and rolling, not sharp and rocky, and covered with moss. Portions of these hills were covered with 3 to 5 inches of snow, but all the exposed portions were free from any snow. This inlet is about 30 miles long and has two outlets to the sea. Along the banks of Grouse River are acres of bushes (3 to 6 feet), hundreds of ptarmigan, and nice-sized fish in the river.

On December 27 started with boy, dogs, and sled for Ke-gik-tok. Had fine weather—short days—visited about 300 people. Some settlements had plenty of oil, seal meat, and fish, and others had little or none. All were very anxious to have deer introduced. Most of them seemed to doubt that ownership would ever pass into their hands. They complain that they have to pay exorbitant prices to Cape Prince of Wales chiefs for deerskins. They reported moss very plentiful. At that time there was so little snow that it would be unnecessary to graze deer on the mountain side. I could see that the smooth expanse of country from coast to mountain was covered with only 3 or 4 inches of soft snow, no crusts or ice. (Unlike last winter, there have been no thaws this winter, consequently no ice crust on snow.) These coast people live on seal meat, oil, fish, ptarmigan, and squirrel. They are not a trading people, have had little or no intercourse with ships; are honest, industrious, and healthy.

Found a very prosperous settlement at Ke-gik-tok of 80 people. Asked me to bring the school up there, etc.

I think several hundred deer could be grazed along the hills from Cape Prince of Wales to Ke-gik-tok. I am satisfied from what I have seen and heard that there are hundreds of acres of good grazing land extending from the coast back to rivers flowing into lakes back of Port Clarence and those flowing into Kotzebue Sound. Settlements are so distributed along the coast from Cape Prince of Wales to Kotzebue Sound that deermen along the mountains could easily be supplied with seal oil and meat. And if inclosures are ever necessary, there are plenty of bushes in small rivers to make them. I think these coast people are better situated and adapted for herding than any other Alaskan people.

They are all superstitious and are great cowards after dark. Perhaps it will be necessary to have them stand watch at night in pairs until they become accustomed to the darkness. (One Eskimo never goes any place after dark if he can help it. He sees ghosts, but is all right with a companion.)

Hoping and trusting that we may sometime have occasion to make use of knowledge obtained on these two little expeditions, I am, very truly, yours,

W. T. LOPP.

Dr. SHELDON JACKSON, *Washington, D. C.*

APPENDIX F.

RECONNOISSANCE NORTH OF PORT CLARENCE BY BRUCE GIBSON.

REINDEER STATION,

Port Clarence, Alaska, August 2, 1892.

SIR: I respectfully submit herewith report of expedition made by Mr. Gibson into interior, north of station, for the purpose of ascertaining probable condition of grazing for reindeer during winter months, copied from his notes, as follows:

"I started on expedition July 27, leaving station at 12 o'clock noon, taking with me as guide, Charley, as expert on pasturage, Chief Herder Pungen, and 5 natives to pack tent and supplies. Traveled in a northwesterly direction, and for about 4 miles found good feed and several small lakes. I then changed my course to north for about three-quarters of a mile and found scarcely any feed it being very rocky and barren. I then went west again for 7 miles and camped at a river about 30 feet wide. The first quarter of a mile of this last course was very rocky, bowlders from 4 to 6 feet through being plentiful, the remainder of the distance being good feeding grounds.

"The next day started north and traveled in that direction for about 9 miles and found good pasture on east side most of the way, and wild flowers and berries grew in places; the west side of river is barren and very perpendicular in several places. I then traveled to west and for a short distance on a small river found some feed, but after traveling for 1 mile I retraced my steps and

went to northeast for about 3 miles, when men began to complain of being tired, and I ordered a halt for the night on a small stream running toward the east. To northeast I saw good indications of feed.

"The next morning I got an early start, taking with me the guide and herder and leaving the others behind to try and find a place to camp that night, having to go without fire the previous night and this morning. I crossed the small river and traveled north; for the first $2\frac{1}{2}$ miles there was but a small quantity of feed, having passed over some very rocky ground. The next $3\frac{1}{2}$ miles there is good pasturage, being plenty of grass and considerable moss. I crossed two small streams in this course. Traveled east to get around some large hills; at about one-half mile came to a large mound of slaty rock—mound about 30 feet high and 150 feet across. For 1 mile east found good pasture; crossed a small stream running southeast. Changed to north and for 1 mile found good grazing ground; halted at a large cluster of rock for lunch and shelter from rain; found a white surface on one of the rocks and I made the following inscription: 'B. Gibson, July 29, 1892, 12 m., from Reindeer Station.'

"Resumed march to north and for 2 miles found good pasturage; crossed a small stream running to south. About 1 mile south is a lake. Changed course to east for 3 miles, crossed one stream, and found good feed in abundance. The land was of a rocky nature. Started to return to camp and traveled southwest for 7 miles to where I gave orders for camp to be located, but found they had gone farther east. I crossed over good feeding ground of a boggy nature, similar to that surrounding station. The herder said it was the best seen since starting on expedition; it was mostly lowland and some low rock hills. I found the camp 2 miles east of where I expected it to be.

"The fourth day I started east and traveled for 4 miles over low hills, the surface being of a broken nature and containing abundance of feed; coming to high hills, changed course to southeast for $2\frac{1}{2}$ miles, finding fair pasturage and ground slightly rocky. Sent packers on to river to find suitable camping grounds for night. I traveled 5 miles to northeast, finding good pasturage of a boggy nature; crossed one small stream. Changed to southeast 1 mile and south 1 mile, finding good pasturage on low hills; changed to southwest over low, hilly, and rocky land, in some places slightly boggy; the feed on this last course was abundant and of a good quality.

"*Fifth day.*—It stormed hard last night and blew the tent down about 3 o'clock. I broke camp about 7 o'clock and started for the station, taking a southwest course. After traveling for about 5 miles I crossed a small stream running very rapidly toward the northeast. The land was low hills and furnished abundance of feed. I traveled 2 miles farther in same direction and crossed a large stream with swift current and running northeast; the feed and land the same as passed earlier in the day. Continuing in same direction, but a little more to west, for 4 miles I traveled over low hills; good pasturage and plenty of moss. I crossed large hill to north of station; found it barren and very high and rocky. It is about 1 mile from bottom of hill to open land, and from there on to station is good grazing land. I arrived at station at 4.15 in the afternoon. It had stormed hard from the time I left until my return, raining and blowing hard.

"In closing, I will say the herder told me the ground passed over was very good and equaled and in places excelled the pasturage in Siberia; he further stated that the pasturage surrounding station was sufficient for a year, providing that in the winter there was not over 1 foot of snow nor over $1\frac{1}{2}$ inches of icy crust on top. If the ice comes first and the snow later, it is impossible for the deer to dig out the feed.

"I noticed in my travels that the feed was on low hills and lowlands, the high hills being barren.

"The guide, Charley, said that for a long distance into the interior the lowlands were the same as passed over, thus showing that, should it be necessary to go to the interior this winter, there will surely be plenty of feed for the reindeer."

Very respectfully,

REV. SHELDON JACKSON,

General Agent of Education in Alaska.

MINER W. BRUCE, *Teacher.*

APPENDIX G.

RECONNOISSANCE EAST OF PORT CLARENCE, BY MINER W. BRUCE.

REINDEER STATION,

Port Clarence, Alaska, August 19, 1892.

SIR: In your letter of instructions for the government of this station, dated July 4, ultimo, you suggest, among other things, that two expeditions be sent out for the purpose of ascertaining the prospects for winter grazing for the reindeer, should the country in this immediate vicinity become covered with ice or deep snow, thus preventing the deer from pawing through it for food.

One route designated by you was to the north for the station, in the direction of Kotzebue Sound; and in accordance with your instructions Mr. Gibson, on the 27th ultimo, made a trip in that direction, lasting four days and a half, the result of which I communicated to you officially on the 2d day of the present month.

On the 3d instant I started on a trip to the northeast, with an oomeak and seven natives, expecting, if the health permitted, to be gone ten days or two weeks.

Our route lay through Grantley Harbor into Imroek Lake, and, having a fair wind, we made a splendid day's sail, taking us about halfway through the lake, and camping the first night on the west side.

I wish especially to call your attention to the route from Grantley Harbor into Imrook Lake, as it affords, in the event of severe storms, unusual shelter for the deer.

A narrow passage, probably 6 miles in length, connects these two beautiful bodies of water, and, as it winds its zigzag course along the line of bluffs on each side, which commence immediately on leaving Grantley Harbor, is unbroken until Imrook Lake is reached. The passage seems to be of nearly an uniform width, and will not exceed, at its widest part, one quarter of a mile. The bluffs on both sides are about 200 feet high, and there appears to be water sufficient to float an ocean vessel.

At several places along the route I left the oomeak, and with the Siberian herder went to the top of the bluff and found the country to the north a gently undulating table-land, and with my glasses I could see that for several miles this character of country did not seem to change.

On the south side the same aspect of country appeared, but 4 or 5 miles to the south the country became more broken, and took in what appeared to be low mountains.

The whole surface of the country on both sides was covered with a luxuriant growth of low bushes, occasional patches of grass, having the appearance of blue joint, and what was certainly red-top grass and mosses.

Even on this table-land the surface of the country was very uneven, being in places hummocky, and the little spots between seemed to be marshy and often filled with water.

The Siberian herder seemed much pleased with the character of the feed, and frequently pointed out the different kinds of grasses or shrubbery that the deer were fond of, and always designated the moss as choice winter grazing.

From the natives in my party I learned that the snow in this passage does not reach a depth of over 1 foot, and usually less; also, that when one side of the passage is covered with snow, the other is lightly covered. If this be true, it would appear that the deer, if it becomes necessary to move them from the station, can find good grazing either one side or the other of the passage; and in severe storms a refuge may be had behind the high walls of the bluffs.

On the morning following our first day's sail I took the herder to the top of the hill just back of our camp. It is probably 400 or 500 hundred feet high and runs out to a point into Imrook Lake. From its top a splendid view of the country in every direction is had. The general contour, as far as I could see, was the same as that observed from the bluffs along the narrow passage. My position commanded a view to the northwest, north, and northeast, and for a distance of 25 miles at least the same character of country prevailed. As far as the eye could reach, not a mountain was visible and not a speck of snow was seen.

To the west there were several miles of what appeared to be a marsh, or a very low land, covered with little patches of water back from the lake. These gradually disappeared in the north, where the land became higher and of the same general character I found farther to the south.

From my position I could see the faint outline of the north end of the lake, probably 12 or 15 miles away, and I thought I could discern the winding course of a river coursing through the table-lands to the north, and if so, it was probably the Agee-ee-puk River.

On the sides and top of the hill from which I was making my observations there was a thick growth of the same kind of grasses and shrubbery found the day before. I was surprised to find along the route to the top of the hill patches of low willow and elder bushes, from the branches of which twittered and flitted small birds, and every few paces we advanced aroused aroused ptarmigan in large numbers.

There was nothing in the appearance of the country, so far as I could see, that would suggest anything like what one would expect to find bordering on the Arctic Circle. On the contrary, the vegetation, much of it, was such as is found in temperate climates, and the birds and insects of the same variety that abound in country where the mercury never ranges lower than zero.

From my position on the top of the hill I could see what appeared to be a break in the range of mountains on the south side of the lake, and as the wind was blowing from the north, thus preventing farther advance in the present state of the weather, I concluded to sail to the other side and investigate the country in that direction.

The distance across was about 4 miles, but the wind died out when about halfway across, and we were compelled to paddle the rest of the way—a very slow process of travel in an oomeak.

On reaching shore we went into camp, and after dinner I started with the natives for the mountains. My purpose was to simply get an idea of the country between the shore of the lake and the foot of the mountains that day, and take all of the next for determining the extent of the pass.

All the afternoon we traversed the lowlands toward the mountains and found the same general growth of vegetation as that found before. It could not well be of thicker growth or to all appearances more nutritious. If anything there was more moss, and perhaps the low bushes hung fuller with blueberries than any found before. There were several small mountain streams leading across to the lake, and if they were supplied from melting snow it was far up or hidden between narrow gorges, as none was seen from where we traveled.

It was after 6 o'clock when we returned to camp, and before retiring the natives understood that on the morrow we were going to try to find a passage into the interior.

Accordingly, by 7 o'clock we were ready to begin our tramp. We took with us an ax, spade, field glass, and two hard-tack apiece. Our course lay across the lowlands toward what appeared to be a break in the mountains, and it was at least 7 miles from camp across to the entrance. Part of the distance lay over comparatively smooth land, and a considerable portion over hummocky ground. There did not appear to be any difference in the thickness of the vegetation or the variety in these

two different surfaces, but the rough ground was the most tedious I have ever attempted to travel over. The little ridges or hummocks are too wide to step over and too shaky to stand upon, so that our trip over this section was a series of ups and downs, mostly the latter.

At our stops for rest I had holes dug with the spade, and was surprised to find a black, sandy soil, from 1 foot to 3 feet deep, in nearly every instance. Sometimes we could not dig more than a few inches on account of encountering stone or slabs of rock, but this was not the rule. I thought I discovered the secret of such a heavy and luxuriant vegetation here, from the rich class of the soil and the abundance of water.

In our way toward the break we passed through two groves of elder and willow trees that were dense, of from 2 to 4 inches in diameter near the butt and from 10 to 15 feet high. It was evident that a little grubbing and thinning out would have improved the size of these trees materially.

Our journey up the side of the mountain, near what appeared to be a pass, was a tedious one, for the nature of the ground was more or less hummocky. I find that this class of land is as liable to occur on high or table land as upon low and marshy ground.

It became apparent as we ascended the mountain that the break or pass which appeared to extend through the range was a false one, and when near the top it appeared to be a sort of blow-out, which came to an abrupt perpendicular at the end of a sudden break ahead. From the top of the mountain we had ascended, although not the highest by considerable, we could see that the country to the south was a succession of mountains of perhaps 2,000 or 3,000 feet high, and that there was no pass into the interior unless following the course of some river.

Accordingly, we commenced our descent about 2 o'clock, and varied our course somewhat. It took us farther to the east along the base of the mountains and then straight to camp.

On our way back we passed over a section of country that was a complete bed of moss. We could rake it up in armfuls, and in a few minutes, during a spell of rest, we gathered sufficient to feed, as our Siberian herder declared, our whole herd of about 150 head of deer for one day.

If his estimate was correct, I feel assured that in this particular section a half-dozen men with hand rakes and pitchforks could, in one week, gather enough to feed our herd the coming winter.

At different times during the day, as had occurred during the day before, the Siberian herder gave me to understand that a trip in search of winter grazing was a useless expenditure of time; that what might appear to be good feeding ground now when winter set in might be covered with a thick crust of ice or deep snow; that nothing could be told from the lay of the land whether feed could be gotten at by the deer or not; that a locality which was all that could be desired this winter would be totally inaccessible next; that it was the practice on the Siberian side to select what appeared to be a good section for winter grazing, and if it became covered with thick ice or deep snow to move the deer to some locality where feed could be had.

This was the same information Mr. Gibson had gathered from our chief Siberian herder, whom he had with him, and I partly resolved, if the wind was not favorable for moving north the following morning, to retrace my steps and return to the station.

I had left rather against my judgment, for my work of late had told on me and I needed rest. On my return to camp that evening I was completely worn out, and during the night experienced a slight chill.

The morning broke rainy, and I was feeling miserably. The judgment of the Siberian that it was a useless trip was a strong argument in my present condition, and when an hour later, a strong north wind settled the matter of progress toward the north against us, at least for that day, but was a fair wind for the station, I ordered everything packed, and after about fourteen hours' sail reached the station.

As we must in a considerable measure depend upon the judgment of the four Siberian herders, who have spent all their lives in the rearing and care of reindeer, it seems to me that in the present state of affairs at the station, with so much to do and so little time before cold weather will set in, when the presence of myself and Mr. Gibson is required, further exploration in search of winter feed ought to be abandoned, or at least postponed until later in the fall.

From this view of the matter I would respectfully ask a modification of your instructions upon this point.

I have the honor to be, very respectfully,

MINER W. BRUCE, *Teacher.*

Rev. SHELDON JACKSON,
General Agent of Education in Alaska, Washington, D. C.

APPENDIX H.

INSTRUCTIONS FOR GUIDANCE OF REINDEER STATION.

ON BOARD U. S. REVENUE MARINE STEAMER BEAR,
At anchor off Port Clarence, July 4, 1892.

SIR: During the months of August and September, 1891, I purchased in Siberia and landed (September 21) at Unalaska 16 domestic reindeer. Having no herder to take charge of them, I turned them loose on the small island of Amaknak, where they successfully wintered.

The landing this morning at this station from the U. S. Revenue Marine steamer *Bear* (Capt. Michael A. Healey, commander) of a band of 53 domesticated reindeer from South Head, Siberia, together with four herders, marks the establishment of the first herd of the kind in Alaska.

This is an event of far more than ordinary importance. If successful, it will create throughout northern and central Alaska a new food supply in place of the whale, the walrus, and the fur-bearing animals that are yearly becoming scarcer and more difficult to obtain.

Furnished a better and surer food supply, the native population, now decreasing in numbers, may reasonably be expected to increase.

Changing them from mere hunters to herdsmen, it will be the first upward step in their civilization.

With the increase in civilization of the natives and the general introduction of domestic reindeer, the vast, bleak, frigid, and now comparatively useless plains of arctic Alaska will be reclaimed and become a source of wealth and prosperity to the land.

The realization of this desirable condition of things is largely in your hands. The friends of the movement and the National Government, which has been asked to extend it, will be encouraged to go forward or led to withdraw from further effort as the herd now intrusted to your care prospers or comes to naught.

With so much at stake, you will make the care and welfare of the herd your first and most constant care. Everything else is of secondary importance.

WINTER GRAZING.

The most trying season will be next winter, when the food that now abounds everywhere will be largely covered up with snow and ice. In Siberia I am informed that the winter grazing is sometimes from 100 to 150 miles away from the summer grounds, the herd being driven back and forth spring and fall.

It is essential, then, that you take early steps to find a good location for winter. To this end I would advise that as soon as your house is inclosed you take Charley and the most experienced of the Siberian herders and make a thorough exploration of the surrounding country. I would make one trip through Grantly Harbor, Yoks-hook River, Imroek Lake, to the headwaters of Agee-ee-puk and Cov-vee-arak rivers; also on the trail from Grantly Harbor toward Unala Kleet and St. Michael. I would also advise a trip into and through the mountains north of the station. Charley will be a good guide, and perhaps the Siberian will know by the lay and general appearance of the land the most suitable place to winter.

I feel great solicitude with regard to this. A mistake may result in the loss of our herd by starvation. The natives around Port Clarence affirm that, while there is not much snow on the plains between the hills and the sea, yet it is covered with a hard, icy crust which the deer can not break through for food. They further say that, years ago, when the wild reindeer frequented the coast, they were only found in summer; that in winter they migrated toward Norton Sound.

It may prove that the winter grazing grounds that shall be selected may be too far away; that it will become necessary to close up for the winter the present house and establish temporary headquarters in the vicinity of the deer. If this necessity arises, I would suggest that you build a log house (if in a timber country) or a dugout for winter use.

PROTECTION FROM DOGS.

Another danger to the herd arises from the attacks of strange dogs. You will, therefore, require one of the herders on watch to be armed, and instruct him to shoot down any dog attacking the herd and report the same to you for settlement. When a dog is thus killed you will send for the owner, explain to him the necessity for the step, express your regret at his loss, and then make suitable payment for the dog.

When any visiting natives come into your neighborhood have them notified at once that they must keep their dogs tied up. Deal firmly, justly, kindly, and patiently with the natives, and thus secure their good will.

Once a month you will count the herd, and if any are missing or have been killed note it down, with cause (if known), and report same, with all the circumstances, to the Bureau of Education.

If any exigency arises by which it becomes necessary to kill a deer for food, you will first use any surplus among the geldings, and after that from among the bulls. None are to be killed, however, except in cases of extreme necessity.

HERDERS.

The herders consist of two classes:

1. Experienced men from Siberia.
2. Native Alaskans who may wish to learn the management and care of reindeer.

The Siberians, being away from their friends and among a strange, selfish, and at times jealous and suspicious people, need your special care and protection. Take pains to make them feel that you have a fatherly interest in them. I hope their treatment will be such that they will choose to remain with us permanently.

The second class should be picked young men (one or two from a settlement), who are expected to take a two years' training in the care of the herd, and thus become fitted to take charge of future herds in the neighborhood of their own homes. At the close of their two years' course, if they have been faithful to their duties and mastered the business, it is proposed to give them the deer as their start in life. This

class will need constant watching. Anyone persistently refusing to obey necessary rules, shirking his duties on watch, or otherwise showing a want of interest in this work, or anyone that proves too dull to learn is to be dismissed from the service and sent away from the station.

The second class are to be subdivided into classes corresponding with the number in the first class.

For instance, if you should have twelve in the second class, and, as now, four in the first class, you will place three of the second class under the tuition and oversight of each of the four of the first class; and whenever he goes on watch they shall accompany him and be subject to his direction. It will then, as a general rule, be necessary for only one of the Siberians to be with the herd at a time. In case of sickness of one of the Siberians his pupils will be assigned duty with the others until the sick one recovers and returns to duty.

After conference with the Siberians you will be able to systematize the hours of watch. In this I would defer largely to the method pursued in Siberia.

When the seasons of watch are determined upon you will see that each watch promptly relieves the preceding one at the proper time.

The herders of both classes are to be housed, clothed, fed, and cared for at the expense of the station.

SHELTER.

At the home station, when off duty, have the herders construct comfortable dugouts for their own use. If you can spare the large dugout already commenced, that can be turned over to the herders.

If it becomes necessary to have the herd a long distance off, buy some walrus hides for a covering, and let the herders make a small tent that can be moved from place to place.

You will make an inspection of the dugouts every Saturday, and require them to be kept as cleanly as possible. Allow no slops or offal to be thrown upon the ground near the door.

SUPPLIES.

You will furnish them with the necessary iron teakettles and pots for cooking. They are expected to procure driftwood for fuel. You will also furnish them a sufficiency of reindeer skins for bedding. These supplies are Government property, and are to be carried upon the inventory list.

CLOTHING.

You will supply them with comfortable native fur clothing, according to the season.

If the supplies I leave with you for this year are not sufficient, you will employ some of the native women to make more. As the reindeer clothing can be purchased ready made in Siberia cheaper than made in Alaska, you will make out at each season a list of garments needed and respectfully request the commanding officer of the revenue cutter to have them purchased for you. For this you will furnish him sufficient barter from the reindeer trade goods.

Once a month you will inventory all bedding, clothing, cooking utensils, and other Government property used by the herders.

Twice a month, if the weather is suitable, all bedding should be hung out to air and sun upon a line erected for the purpose.

Herders of the second class need special watching that they do not give or sell their clothes, bedding, or other Government property to their friends.

FOOD.

Flour, corn meal, pilot bread, beans, and tea will be sent from San Francisco. It is best, however, as far as possible, to preserve their native diet. You will therefore purchase supplies of oil, dried and fresh fish, etc.

As soon as you can determine it fix upon a regular ration, which you can issue daily or at regular intervals as experience shall show to be best.

Outsiders or friends are not to be allowed to gather in and eat with the herders. Nor shall the herders be allowed to give them food. If any food is to be given away it must be done by the superintendent or his assistant, and an account kept of the same, giving date, approximate amount, and number of recipients. You will encourage the herders when off duty to trap for rabbits and foxes both for fur and food.

When any garment, bedding, skin, or other property (except food) is issued to a herder or his wife, charge it against him in a book kept for the purpose. This will be a check against wastefulness, prevent anyone receiving more or less than his share, and enable us to keep an account of the expense of training each individual.

WIVES.

If any of the herders shall be married and have their wives with them you can issue a ration and clothing also to the wife, requiring from her in return some sewing or cooking for the herders. If there are several women you can apportion the work among them.

SCHOOL.

If circumstances permit, you will gather the herders that are off duty, and such others as may wish to attend, into the schoolroom for two or three hours daily (except Saturday and Sunday) and drill them in elementary reading, arithmetic, and writing. Special emphasis will be given, both in and out of school, to the use of the English language.

FUEL.

As far as possible you will procure and use driftwood for fuel at the station. The coal is to be reserved for keeping a fire through the night and for seasons when you may be unable to secure driftwood.

MORALS.

It is scarcely necessary to write that you will allow no liquor, gambling, profanity, or immorality at the station or among the herders.

You will allow no barter or unnecessary work at the station on Sunday.

You or your assistant must always be at the station. Both of you must not be absent at the same time. If the station is temporarily removed to the winter grazing grounds then that for the time being becomes headquarters.

REPORTS.

1. You will keep a log book or brief daily journal of events at the station, extending from July 1 of each year to the following June 30. This book is to be mailed to the Bureau of Education.

2. You will keep in a book furnished you an itemized statement of all barter for supplies for the station, giving date of transaction, name and quantity of article purchased, and articles and quantities of each given in exchange. A copy of this statement will be annually forwarded to the United States Bureau of Education.

3. On the last day of March, June, September, and December of each year you will make out an inventory of all stores and public property in your possession, including bedding and cooking utensils in use by the herders. This does not include the clothing issued to and in use by the herders.

A copy of these reports will be forwarded by the annual mail to the United States Bureau of Education.

4. On the last day of June each year you will make out and mail to the United States Bureau of Education an annual report of operations at the station. In this report you will embody any recommendations that your experience may suggest for the benefit of the station.

5. On the 1st of August each year you will make a requisition for supplies for the following year.

As the work is new and untried, much must necessarily be left to your discretion and good judgment. Wishing you great success, I remain,

Yours, truly,

SHELDON JACKSON, *General Agent.*

Mr. MINER W. BRUCE,

Superintendent of Reindeer Station, Port Clarence, Alaska.

APPENDIX J.

DOMESTIC REINDEER IN LAPLAND.

[From Du Chaillu's *Land of the Midnight Sun*, volume 2, pages 167 and 168.]

The Fjeld Lapp's time is engaged in adding to his herd, to which he and his family devote all their energies, for their welfare depends on the growth of the animals. It is difficult to ascertain exactly the increase or decrease of reindeer according to the districts, for the people often change, and there has been of late years in the north a large immigration of Norwegian Lapps to the territory of Sweden, especially to Keresuando, but, taken as a whole, the population and the reindeer are increasing. There is a greater number in Norway than in Sweden, owing to the number of stationary bönder (farmer) and sea Lapps, which far outnumber the nomads.

According to the late census there are in Sweden (1870) 6,702 Laplanders, with 220,800 reindeer; in Norway (1865) 17,178 Laplanders, with 101,768 reindeer; in Finland (1865) 615 Laplanders, with 40,200 reindeer; in Russia (1859) 2,207 Laplanders, with 4,200 reindeer.

With those that belong to farmers and others I think we may safely say that the reindeer number about 400,000. The Samöides have the largest and finest breeds, which are not numbered among those of the Lapps. In Kautokeino there are Lapps who own 2,000 reindeer; in Sorsele, in Sweden, one is said to own 5,000, and others 1,000 and 2,000. Some of the forest Lapps have 1,000. In Lulea Lappmark there are herds of over 2,000; in Finmarken, of 5,000, and some Lapps have owned as many as 10,000. A herd of 2,000 to 2,500 is said to give about 200 to 250 calves yearly.

Every owner has his own mark branded upon the ears of all his reindeers, and no other person has a right to have the same, as this is the lawful proof of ownership; otherwise when several herds are mingled on the mountains the separation would be impossible. According to custom no one can make a new mark, but must buy that of an extinct herd; if these are scarce the price paid to the families that own them is often high; the name of the purchaser and each mark have to be recorded in court, like those of any other owner and property. The tax paid is according to the pasture land occupied.

APPENDIX K.

U. S. REVENUE STEAMER BEAR,
San Francisco, Cal., December 6, 1890.

DEAR SIR: Under orders from the Secretary of the Treasury, I have been ten years on the Bering Sea and Arctic Ocean station of the United States Revenue Marine Service.

My duties have brought me very closely in contact with and greatly interested me in the native population.

On account of this interest, I have watched with pleasure the coming among them of the missionaries of the several churches and the teachers of the Government schools.

I have also seen with apprehension the gradual exhaustion of the native food supply.

From time immemorial they have lived principally on the whale, seal, walrus, salmon, and wild reindeer. But in the persistent hunt of white men for the whale and walrus the latter has largely disappeared and the former been driven beyond the reach of the natives. The white men are also erecting canneries on their best fishing streams, and the usual supply of fish is being cut off; and with the advent of improved firearms the wild reindeer are migrating farther and farther away.

With the disappearance of the whale, walrus, salmon, and reindeer a very large portion of their food supply is taken away, and starvation and gradual extinction appear in the near future.

On my recent cruise I was accompanied by Dr. Sheldon Jackson, United States general agent of education, and together we have made the question of a future food supply the subject of special thought and investigation.

We have consulted with a few of the leading teachers, missionaries, traders, and whaling captains whom we have met, and they, without a single exception, agree with us that the most practical relief is the introduction of domesticated reindeer into that portion of northern and arctic Alaska adapted to them.

In Lapland there are 400,000 domesticated reindeer, sustaining a population of 27,000. In Siberia, but a few miles from Alaska, with climate and country of similar conditions, are tens of thousands of tame reindeer supporting thousands of people, and it will be a very easy and comparatively cheap matter to introduce the tame reindeer of Siberia into Alaska and teach the natives the care and management of them.

This it is proposed to do in connection with the industrial schools established among the natives by the Bureau of Education. As in connection with the industrial schools in Dakota, Indian Territory, and elsewhere, the Indian boy is taught the raising of stock, so in the industrial schools of Alaska it is proposed to teach the Eskimo young men the raising of tame reindeer.

A few thousand dollars expended now in the establishment of this new industry will save hundreds of thousands hereafter. For if the time comes when the Government will be compelled to feed these Eskimo it will cost over \$1,000,000.

In northern Alaska there are about 400,000 square miles that are adapted to the reindeer and are unfit for anything else.

This region has a present population of about 20,000, all of whom will be ultimately benefited by the new industry.

With an assured support, such as will come from herds of tame reindeer, there is no reason why the present population shall not be increased in numbers and advanced to the position of civilized, wealth-producing American citizens.

Asking for your favorable consideration and earnest advocacy of this matter, I remain, very respectfully,

M. A. HEALY,
Captain, United States Revenue Marine.

Hon. W. T. HARRIS, LL. D.,
United States Commissioner of Education, Washington, D. C.

DESTITUTION AMONG THE ALASKA ESKIMO.

[An interview with Capt. M. A. Healy, United States Revenue-Marine Service, in San Francisco Chronicle, December 12, 1890.]

For several seasons past the Eskimo of northwestern Alaska have experienced great hardships in obtaining a supply of deer meat for their winter stores. It is to be feared that when the *Bear* makes her annual visit to the Arctic next summer many of the villages will be found to have lost their residents from starvation. The latest advices from the Arctic report a failure not only in the autumn deer hunt, but in the entire catch of whales, walrus, and seals.

Naturally of a timid disposition, the deer have learned that the natives with breech-loading arms are far more formidable foes than when bows, arrows, and spears were employed in the chase. Again, the Eskimo spare neither young nor old when a herd is found, and little suckling fawns, as well as does carrying young, fall victims to their guns.

Formerly, on the lower Yukon around St. Michael, on Norton Sound, and in the country known as the Kotzebue Sound district, numbers of deer made yearly visits. Now it is rare to find that the natives living at these points have seen or tasted deer meat.

The Alaskan deer of the Arctic and sub-Arctic regions have been confounded with the reindeer of other localities, but while certainly belonging to the rangifer family, they are the true barren-ground caribou, differing from the upland caribou and domesticated reindeer of Lapland and Siberia in being smaller in body and horns. From July to September the instincts of the deer induce them to come from the interior to the seacoast to obtain rest and freedom from the tortures inflicted by the hordes of mosquitoes that infest the inland swamps, and also to get saline matter from the herbage and moss growing in proximity to the ocean. In September they commence their inland migration, and from July until the middle of October they are ruthlessly pursued by the natives. Some rest is afforded to the animals during the dark days that prevail in the Arctic Zone from November until January, but as soon after the early part of February as the weather permits the food-seekers again take the field. The does have their young during April, and by a provision of nature the horns of the female only attain size during the time she is suckling the fawn and until it reaches such an age that it can feed—about 2 months.

When it is considered that a deer weighing on an average 125 pounds is consumed at a single sitting by five or six natives, it may be readily perceived that the average returns of a successful hunting party must be large to feed a village.

During the past season in the Arctic the attention of Captain Healy, of the U. S. revenue steamer *Bear*, has been directed in a very pointed manner to the attainment of some method whereby the supply of deer for food and clothing purposes may be increased in northwestern Alaska. This year, taking advantage of the presence on the *Bear* of Dr. Sheldon Jackson, United States commissioner of education for Alaska, the captain, in conjunction with Commissioner Jackson, intends to present to the Secretary of the Interior data upon the subject.

Within a radius of 100 miles inland from the shores of the ocean on the Siberian coast, from Cape Navarin to Plover Bay, there are a people known as deer men. They belong to the Chukchee tribe of Siberians, and are essentially a nomadic race, wandering from East Cape, on the northern coast, to Cape Navarin, southward. Accompanied by their herds of tame reindeer, aggregating in many instances thousands, they roam in search of food. These reindeer, while resembling the Alaskan species in the main, differ in the texture of their skins, the pelts being spotted brown and white, with a smooth surface. These deer men subsist mainly on the products of their herds, bartering the skins with the coast natives for tobacco, seal oil, walrus hides for their boot soles, and other minor commodities, such as powder, shot, lead, and flour. At Cape Navarin and East Cape, Siberia, they sometimes meet the whaling ships and sell them deer meat and skins for tobacco, etc.

Captain Healy's ideas are to propose to the Government that he be empowered to purchase a number of these deer of both sexes and transport them on the *Bear* to some point on the Alaskan coast where moss and feed are plentiful. These deer are to form the nucleus of a herd, and from the yearly increase they can be distributed over other portions of the Northwest Territory. As the Alaskan Eskimo are not skilled in herding the deer, Captain Healy intends, if permission be granted by the Government, to endeavor to enlist the services of some experienced Siberian natives to instruct them.

Unless some measures be adopted as suggested by Captain Healy, it is sure that a decade will witness the extermination of the people of our arctic province on its northwest shores. The results of the active and unscrupulous chase of their pelagic food supplies by the whalemen have already become evident; walrus are almost invisible on the ice floes within reach of the native hunters, while the flurried and galled whale makes its passage to the unknown regions of the Arctic Ocean at a speed which defies the natives to capture it.

The proposition of Captain Healy will be communicated to the Washington authorities at an early date.

DESTRUCTION OF THE WHALES.

[From Bancroft's History of Alaska, pages 668 and 669.]

Of whaling enterprise in the neighborhood of the Alaskan coast mention has already been made; but a few statements that will serve to explain the enormous decrease that has occurred in the catch within the last three decades may not be out of place.

Of the 600 or 700 American whalers that were fitted out for the season of 1857, at least one-half including most of the larger vessels, were engaged in the North Pacific. The presence of so vast a fleet tended, of course, to exhaust the whaling grounds or to drive the fish into other waters, for there are no permanent whaling grounds on any portions of the globe except those encircled by ice for about ten months in the year. In the seas of Greenland, not many years ago, whales were rarely to be seen; in 1870 they were fairly plentiful. The sea of Okhotsk and the waters in the neighborhood of the Aleutian Islands were a few decades ago favorite hunting grounds, but are now almost depleted, while in 1870 the coast of New Siberia was swarming with whales. Schools of sperm whale are occasionally seen between the Alaska peninsula and Prince William Sound, and the humpback sometimes makes its appearance as far north as Baranof Island. Between Bristol Bay and Bering Strait a fair catch is sometimes taken, but most of the vessels forming what is termed the North Pacific whaling fleet now pass into the Arctic Ocean in quest of their prey. Probably not more than 8 or 10 of them are employed on the whaling grounds of the Alaskan coast.

In 1881 the whaling fleet of the North Pacific mustered only 30 and in the following year 40 craft, of which 4 were steamers. The catch for 1881 was one of the most profitable that has occurred since the date of the transfer, being valued at \$1,139,000, or an average of about \$57,000 for each vessel, some of them returning with cargoes worth \$75,000 and few with cargoes worth less than \$30,000. In 1883 the catch was inconsiderable, several of the whalers returning "clean," and few making a profit for their owners.

The threatened destruction of these fisheries is a matter that seems to deserve some attention. In 1850, as will be remembered, it was estimated that 300 whaling vessels visited Alaskan waters and the Okhotsk and Bering seas. Two years later the value of the catch of the North Pacific fleet was more than \$14,600,000.

After 1852 it gradually decreased until in 1862 it was less than \$800,000; for 1867 the amount was about \$3,200,000; in 1881 it had again fallen to \$1,139,000, and for the season of 1883 there was still a further reduction.

SAN FRANCISCO, *December 18, 1890.*

DEAR SIR: Referring to your desire to obtain information relative to the introduction of reindeer into the northwest portion of the Territory of Alaska, I would say that in my opinion the project is entirely feasible. My experience in Alaska permits me to state on authority that the next decade will witness the extinction of the American reindeer, or rather caribou. In 1881, when I first visited the district of Norton and Kotzebue sounds and the lower Yukon, deer were plentiful. This past winter (1889) not a single animal had been seen within a radius of 200 miles. Similar conditions are coexisting from Fort Clarence to Point Barrow, and where in former years the hunters had to travel but 50 miles to reach the deer haunts, to-day they travel twice that distance. These contingencies arise from three causes:

1. The indiscriminate slaughter of young and old animals.
2. The use at the present day of improved weapons of the chase, in lieu of the primitive bows, arrows, and spears.
3. The conditions of wind prevailing at the seasons when the deer go to and from the coast. It must distinctly be understood that upon a supply of these animals our Alaskan Eskimo depend for clothing as well as their stores of meat, should their pelagic sources of provender fail.

The proposition to introduce deer from the Siberian herds can be effected at a cost of but a few thousand dollars.

The location for the first experimental station should be on Choris Peninsula or the vicinity of Kotzebue Sound. This location has climatic similarities with Siberia. The food (moss) supply is abundant and herding easy.

As the results of this initial experiment become manifest, additional locations for herds can be established. Within two seasons the Chukchee herdsmen will be able to instruct the Eskimo in the style of herding.

I have made inquiries upon the subject and now give you the result. Ten years ago the Russian steamer *Alexander* went to the Kamchatka Peninsula, and officers of the Alaska Commercial Company bought seven male and seven female deer, transporting them to Bering Island (one of the islands leased by the company from Russia). Captains Blair and Greenberg, and Superintendent Lubegoi inform me that the herd now numbers 180. From this you can judge the rate of propagation.

The revenue steamer *Bear* can be utilized for transportation, and I know no man more capable of conducting the experiment than Captain Healy.

I hope that the small sum required will be voted by Congress, as unless something is done for these people their annihilation is only a question of a brief period.

The whalers have so frightened the big fish that the natives are unable to pursue them in their rapid passage, while the extermination of the walrus is almost a fact.

These remarks I present as requested.

Yours, very truly,

HENRY D. WOOLFE.

DR. SHELDON JACKSON, *Washington, D. C.*

WILD REINDEER IN ALASKA.

[Charles H. Townsend in the Report of the Cruise of the United States Revenue-Marine Steamer *Corwin*, 1885, Capt. M. A. Healy, commanding, pages 87 and 88.]

Reindeer are found more or less regularly throughout Alaska. They were found by Mr. McLenagan on the Noatak, as well as by our party on the Kowak. Traders in the service of the Alaska Commercial Company told me of their common distribution over the Yukon, Kuskokwim, and Aleutian divisions of the country. They have even been shot on Oumimak Island, at the end of the peninsula; but reindeer are restless animals, irregular in their migrations and habits. Sometimes they desert whole sections of the country for months together, and they appear to have withdrawn from many regions where firearms have been introduced. Notwithstanding the fact that large herds of reindeers are kept in a state of domestication by the Chukchees at East Cape and other well-known places on the Asiatic side of Bering

Straits, with whom the natives of the Alaskan side communicate regularly, there appears to be no domestication of the species whatever in Alaska, nor indeed in any part of North America.

In time, when the general use of firearms by the natives of upper Alaska shall have reduced the numbers of this wary animal, the introduction of the tame variety, which is a substantial support to the people just across the straits, among our own thriftless, alcohol-bewitched Eskimos, would be a philanthropic movement, contributing more toward their amelioration than any system of schools or kindred charities. The native boats could never accomplish the importation, which would, however, present no difficulty to ordinary seagoing vessels. The taming of the American reindeer is impracticable, for domestication with this animal at least is the result of subjection through many generations. Something tending to render a wild people pastoral or agricultural ought to be the first step toward their advancement. In our management of these people, "purchased from the Russians," we have an opportunity to atone, in a measure, for a century of dishonorable treatment of the Indian.

REINDEER.

[From Encyclopedia Britannica, volume 7, pages 24 and 25.]

The reindeer (*Tarandus rangifer*), the only domesticated species of deer, has a range somewhat similar to the elk, extending over the entire boreal region of both hemispheres, from Greenland and Spitzbergen in the north to New Brunswick in the south. There are several well-marked varieties, differing greatly in size and in form of the antlers, the largest forms occurring farthest north, while by many writers the American reindeer, which has never been domesticated, is regarded as a distinct species. The antlers, which are long and branching, and considerably palmated, are present in both sexes, although in the female they are slender and less branched than in the males. In the latter they appear at a much earlier age than in any other species of deer, and Darwin conjectures that in this circumstance a key to their exceptional appearance in the female may be found. The reindeer has long been domesticated in Scandinavia, and is of indispensable importance to the Lapland race, to whom it serves at once as a substitute for the horse, cow, sheep, and goat. As a beast of burden it is capable of drawing a weight of 300 pounds, while its fleetness and endurance are still more remarkable. Harnessed to a sledge it will travel without difficulty 100 miles a day over the frozen snow, its broad and deeply cleft hoofs being admirably adapted for traveling over such a surface.

During summer the Lapland reindeer feeds chiefly on the young shoots of the willow and birch; and as this season migration to the coast seems necessary to the well-being of the species, the Laplander, with his family and herds, sojourns for several months in the neighborhood of the sea. In winter its food consists chiefly of the reindeer moss and other lichens, which it makes use of its hoofs in seeking for beneath the snow. The wild reindeer grows to a much greater size than the tame breed, but in northern Europe the former are being gradually reduced through the natives entrapping and domesticating them. The tame breed found in northern Asia is much larger than the Lapland form and is there used to ride on. There are two distinct varieties of the American reindeer, the barren-ground caribou and the woodland caribou. The former, which is larger and more widely distributed of the two, frequents in summer the shores of the Arctic Sea, retiring to the woods in Autumn to feed on the tree and other lichens. The latter occupies a very limited tract of woodland country, and, unlike the barren-ground form, migrates southward in spring. The American reindeer travel in great herds, and being both unsuspicious and curious they fall ready victims to the bow and arrow or the cunning snare of the Indian, to whom their carcasses form the chief source of food, clothing, tents, and tools.

APPENDIX L.

Captain Healy, in January, 1892, writing to Senator Charles N. Felton, says:

"The three great problems of existence of both natives and whites in the Territory of Alaska are food, clothing, and transportation. They are to be solved in a rigorous climate and rough and almost impenetrable country, and one in which nothing as yet is produced from the ground. The food supply must either be found in the flesh of the wild animals and birds of the country or brought from without. With the white population the food might be said to be brought wholly from without. The enormous expense this entails has kept this population down to the narrowest limit of employees of firms or companies capable of maintaining stations there, and confined these stations to a few scattered well-known points along the immense stretch of seacoast or on some of the principal rivers, as the Yukon.

"FOOD SUPPLY.

"The native population of the northwest part of the country depend for food upon whale, walrus, seal, fish, and what few wild animals, such as deer and caribou, they can kill. The whale and walrus have been so persistently pursued by white men that they have rapidly diminished and are now so scarce and shy that their capture by the natives is attended with great difficulty and uncertainty. This scarcity of their principal supply of food is greatly felt by the natives along the whole northwest coast and to such an extent that in the short space of winter whole villages have been wiped out.

"I have seen almost the entire population of St. Lawrence Island lying strewn about their huts dead from starvation; and this winter of 1891-92 the same fate may be that of King Island. Upon my visit

there in September last, the seal and walrus catch having failed them, the natives were reduced to the direst extremities. Their larders were exhausted and their only means of subsistence their dogs and the kelp and carrion cast up by the tide. What supplies could be spared from the vessel and what bought at St. Michael station were given the people, with the hope that it would tide them over until more successful hunting. But this hope is not without misgiving that upon my return in the spring I shall find many of them whom I count as friends cold in death. The interior natives are dependent wholly upon caribou and deer and what fish come into their streams during the short summer. Caribou and deer are rapidly diminishing there, as they have in other countries, and the fishing streams are being taken up by white men, so that the lines of existence are on all sides being drawn tighter and tighter about these poor native Alaskans.

"REINDEER-SKIN CLOTHING.

"Clothing of reindeer skin has been found the best and only kind to withstand the intense and continued cold of the country. These skins are now bartered at a high price from the natives of the Siberian coast, and are passed along the Siberian side from village to village, increasing in value the farther they go from the Bering Straits. The experience of white men and natives has been the same, and even in our summer visits to the country we on the vessel use reindeer clothing to keep from suffering.

"The methods of transportation now in use in Alaska are by dog trains and boats. By boat it is impossible to travel nine months in the year, and during the three months of summer when the streams are open they can be used only downstream. By dog trains transportation is limited, slow, and uncertain, and the greater part of the load is taken up with food for the animals. These dogs have been so closely bred that they are now degenerated in size, strength, and sagacity. I have for years been requested by natives to bring them a larger breed to improve their dogs, and the Hudson Bay Company has imported the English mastiff for use in trains where the native dog is too slight.

"Among the whites the greatest difficulty experienced by miners, missionaries, explorers, and residents has been the want of a rapid and assured means of transportation. The history of every expedition that has penetrated into the country any distance from the coast has been one of suffering and oftentimes hunger from the difficulty of travel and packing. Horses, cattle, asses, and other beasts of burden, excepting tame reindeer, are out of the question, because they can not live in the country, and it is impossible to provide food for them when snow covers the ground the larger part of the year. On account of this difficulty the country, except along the seacoast and a few of the navigable rivers, is as little known to-day as when it was first bought. And those great mineral deposits which Alaska is said to contain remain as yet undiscovered.

"WHAT THE REINDEER MIGHT DO.

"To my mind the only satisfactory solution of all three of these problems, important as they are, is the introduction of tame reindeer into the country. In proper numbers they will transform the native population from a fishing to a pastoral people and prove to them a never-failing supply of food. The hides of the animals already furnish almost the only clothing used, but at a greatly exaggerated cost. And to the white explorers, miners, missionaries, and settlers the reindeer will prove a means of transportation and packing that will enable them to learn and develop the resources of a vast country.

"The natives of Siberia have for centuries herded and reared the tame reindeer, and thus been safe against periodical periods of starvation when the whale and walrus fail them. They are a strong, swift, and hardy animal, tractable, and easily broken to harness and packing, and especially adapted, or, in fact, made for the country and climate. In travel they are self-sustaining. The supply of moss upon which they feed covers the whole of northern Alaska, and instinct leads them to secure it in winter as well as summer by burrowing through the deepest snows. It is not necessary for us to speak of the value of such pack animals to the prospector. To the explorer they are equally valuable, and when supplies fail are equally valuable as food.

"If I may revert back to the days of the Western Union Telegraph expedition to that part of the country, where reindeer could be procured for drafting as well as for food, the thousand and one obstacles that at first seemed insurmountable were, through the medium of these animals, easily overcome.

"The natives of Alaska quite see the advantage of such an animal in their midst, have expressed to me their eager wishes for them, and along the Yukon, the most thickly settled part of the country, the white people are enthusiastic over their introduction, for in them they see a solution of many of the difficulties of existence there.

"Horses and cattle have been tried in this section, but, on account of the unacclimated nature of the animals and the impossibility of feeding them in winter, with no success.

"THE SIBERIANS WILL SELL.

"Some writers and others have claimed that the Siberian natives will not sell reindeer to white men, but Doctor Jackson and I have disproved this by buying during the past summer, at different points on the Siberian coast, 16 of the animals and securing promises to sell us as many as we could take care of the coming summer, should they be wanted. The 16 we purchased, the first ones to be introduced into the Territory, we placed at Unalaska for propagation.

"I believe this is the most important question that bears upon the Territory of Alaska to-day, and a small sum donated by Congress for the purpose will in the end develop the country, its character and

resources, and prove a great benefit to the commerce and wealth of the United States in general and the Pacific coast in particular.

"I am referring not to the Alaska of the tourist—that narrow strip of island from the southernmost boundary to Sitka—but to that immense territory of 500,000 square miles of the north and west of which the world has no knowledge and no conception, and to which the Alaska of the tourist bears as much relation as the State of Florida does to the whole United States."

APPLICATION FOR A TEAM OF REINDEER.

FORTYMILE CREEK, *August 13, 1892.*

DEAR SIR: Captain Peterson informs me that you would bring some reindeer, bought by the Government to distribute in Alaska. If you did get any and send me a pair, or, better, two cows and one bull, I will surely reward your trouble. I am doing freighting here in the winter with dogs, and reindeer would be far ahead of them. You could leave them in somebody's care in St. Michael for the winter and have them sent up here in the spring. I will pay for all the expenses. If you did not get any this year for the Government and you have a chance to buy some for me I wish you would do it, and I will pay for them whatever it is.

Respectfully,

FRITZ KLOKE,
Fortymile Creek, Alaska.

APPENDIX M.

COMMERCIAL VALUE OF REINDEER.

[N. Width, importer and commission merchant of Scandinavian products, 63 Broadway, room 29. Cable address, "Puncheon, New York."] 607 PENN MUTUAL BUILDING,
Philadelphia, Pa., April 16, 1892.

DR. SHELDON JACKSON,
Bureau of Education, Washington:

I received your favor of the 14th and a pamphlet, which I have read with great interest. If reindeer can be imported into Alaska from Siberia, and if there exists an abundance of reindeer moss in Alaska, the facilities for realizing the plan are rather great.

Besides the advantages mentioned in the pamphlet, there exists one to which I want to call your attention—the great commercial importance.

To Sweden and Norway it is not only the Laplanders who live on reindeer. Smoked reindeer meat and smoked tongues are sold everywhere in the said countries; and the hides are in great demand, tanned to a soft skin (used for gloves, military riding trousers, etc.).

There are merchants in Stockholm the only trade of whom is in Lapland products, and the skins, dried with the hairs on, are exported by the thousands to Germany and England. I sold myself, in 1878, about 5,000 such skins to a firm in Leipzig, Germany. The Norwegian Preserving Company uses large quantities of reindeer meat for canning, and fresh it is considered a delicacy. Russia exports fresh reindeer meat, frozen, in carloads to Germany.

The price of smoked hams is in Sweden about 9 to 10 cents a pound; of smoked tongues, 8 to 10 cents apiece (or a pair, I can not exactly remember which); of dried hides, with hair on, \$1.25 to \$1.75 apiece, and more if they are not worm bitten. The Swedish reindeer have mostly a kind of insect which lays its eggs in their skins. This causes holes, which are seen in the skin when tanned and diminish their value. The hairs are in great demand for the filling of life-saving apparatus (buoys, etc.), while they possess buoyancy in a wondrous degree. The best existing glue is made of reindeer horns. If I were sure of getting a trade in these articles and had the money, I would not consider it a moment, but go to Alaska at the first opportunity and make a fortune in ten years.

The number of reindeer killed for the trade (besides what the Laplanders use for themselves) is yearly 12,000 to 15,000, in Norway probably 6,000 to 7,000; besides, Sweden imports large quantities of meat and skins from Finland.

In 1881 I visited the fair in Nizhni Novgorod, Russia, and became there acquainted with a merchant from Nuhangel, who had brought to the fair 5,000 pair smoked tongues and 6,000 tanned skins (the tanned skins have a value of \$2 to \$3 apiece). A Swedish dragoon regiment wears trousers exclusively made of tanned reindeer skins (no other material permitted).

I think these facts might be of some interest. Captain Healy says in his letter: "If the Government will be compelled to feed the Eskimo it will cost over \$1,000,000." If the Government realizes the plan of domesticating reindeer it would probably bring a good yearly income to the United States.

Yours, respectfully,

N. WIDTH.

I should be very much pleased to learn later on how far the project succeeds and what steps the Government will take. If I move to Puget Sound next fall I shall probably make a trip to Alaska.

PHILADELPHIA, PA., *December 31, 1892.*

DEAR SIR: Your favor of the 29th received, and in answer beg to say that I wrote to a friend in Norway about a book or pamphlet, as desired. I think, however, it would be easier to get such a book from England, as probably some English tourist or other has written about the Laplanders, who always have been an object of great interest to tourists traveling in Norway.

The acclimatization of reindeer in Alaska would most certainly considerably increase the revenues from this province as soon as some thousand deer could be yearly slaughtered and the hides and meat brought into the market. I believe I have written to you hereabout on a previous occasion. The tanned skins (soft and with a beautiful yellow color) would no doubt find a ready sale. In Sweden they are paid with 7 to 10 kronor (\$2 to \$2.75) and used for military pantaloons, gloves, bed pillows, etc., and the hair, owing to its great buoyant quality, is much used for life-saving material. Russia sends frozen reindeer meat by carloads to Germany.

If I had capital, and if the climate in Alaska were not too severe, I would like very much to start such trade, in which I have some experience.

There is also another animal which would suit admirably for Alaska—the so-called “Thibetan ox,” “yak,” also “grunting ox” (probably while grunting as a hog). The animal has feet as a goat, well fitted for climbing rocks and stones. The cow gives an excellent milk, which gives an excellent butter (the reindeer has not this merit); is used in Tibet also very much for transportation purposes. This ox, which is to the natives in Tibet what the reindeer is to Laplanders, is admirably qualified to sustain cold, seems even to love the cold, and to thrive best in cold and rough weather. It loves to throw itself into frozen lakes and rivers, to lie in snow and shady places, is always lying in the open air, has to seek its food for itself, only the herders have to take care to bring it down in the winter in the lower regions where the snow melts and the food is accessible.

In Tibet these animals are completely left to themselves. If taken some care of they might multiply quicker and be much improved. They are seen in the zoological gardens in Europe, probably also in this country; might be shipped from Bombay or Calcutta, I presume. This animal might become by and by as abundant in Alaska as formerly were the buffalo on the Western prairies, and make Alaska a visiting place for sportsmen.

With my compliments for the new year, I remain, dear sir, yours, respectfully,

N. WIDTH.

Rev. SHELDON JACKSON, *Washington, D. C.:*

P. S.—As a proof of what man can do with a good will and good sense, even in the cold, inhospitable region, I wish to mention that in a place in Sweden, under 67° north latitude, where rich iron ores have been found and bought by an English company, a Swedish colonel and engineer in 1890 planted a grand park and garden, where all kinds of vegetables are growing, even rhubarb, asparagus, cauliflower, raspberries, strawberries, currants, and large pine and birch trees. The park has an area of 2,800 to 3,000 square feet.

APPENDIX N.

THE CHAMBER OF COMMERCE OF SAN FRANCISCO,

San Francisco, January 20, 1891.

Resolved, That our delegation in Congress be requested to urge the passage of the joint resolution introduced December 19, 1890 (H. Res. 258), extending to Alaska the benefit of laws encouraging instruction in agriculture and the mechanic arts.

Adopted unanimously by the Chamber of Commerce of San Francisco this 20th day of January, A. D. 1891.

Attest:

[SEAL.]

THOS. J. HAYNES, *Secretary.*

CHAPTER XVIII.

I.—A DEFINITION OF CIVILIZATION.

An Address by W. T. Harris before the Graduates at the Commencement Exercises of the Indian Industrial School, Carlisle, Pa., March 2, 1899.

It is universally admitted that among the people at present living on the globe the Indians are the proudest and bravest. They prefer their tribal freedom to life. They possessed this characteristic when first discovered by Europeans coming to this country as discoverers and emigrants. It seems a strange thing that a proud people having so much self-respect should not take on a higher civilization if they came in contact with it. In fact, it would seem as if there must be something wrong with a civilization that claimed itself to be of a higher order if it failed to convert a lower civilization and incorporate it into its own. And yet in the face of this likelihood it must be admitted that the policy that has prevailed in America has been extermination toward the Indian at the hands of the white man instead of civilization.

The hasty conclusion from this fact would be that the white man is all wrong and that the justice is all on the side of the Indian. What right, it is asked, has one nation to impose its forms on another by force, on the ground that it is a higher form of civilization? What infallible criterion have we, asks another, by which we may be entitled to conclude that we have a higher civilization than the neighboring nations? Why is not the Indian civilization as good as ours? Why is not the Chinese civilization or the civilization of the Philippine Islands as good as the civilization that calls itself the United States, or Great Britain, or France, or Germany? This is a serious question and needs to be understood if one is going to sit in judgment upon national conduct.

I ask you, therefore, to consider with me the answer which can be made to the question, What is it that makes one civilization higher than another? What is a high civilization and what is the highest civilization?

I offer a definition for civilization. It is this: A people is civilized when it has formed institutions for itself which enable each individual to profit by the industry of all his fellow-citizens; when it enables each individual to profit by the experience and wisdom, the observations and the thoughts of his fellow-citizens; when it encourages each individual into a rational self-activity by which he contributes, either through his industry or through his observation and his thoughts, to the benefit of the people with whom he lives.

This definition of civilization can be put in another form which shows its significance. Civilization enables man to conquer nature and make it his servant; to command the services of heat, light, electricity, and of all the inorganic elements; to command also the plant world or vegetation for his uses; to command also the animal life for the same service; in short, to command the services of nature for food, clothing, and shelter. Besides this control over nature, civilization should give man access to the history of his race; access to his literature; access to its scientific discoveries; access to its various inventions; and, above all, access to its moral and religious ideals. Civilization, in short, should give man command of the earth and likewise command of the experience of the entire race.

In the light of this definition we may approach the civilizations as they actually exist and inquire how far they have realized the ideal, how high they have climbed on the ladder

of civilization. At once we see how low the tribal civilization is as compared with the civilization of Great Britain, or France, or Germany. There is no tribal civilization on the face of the earth, and never was one, which could compare with these nations in its knowledge of the uses of mineral substances, chemical substances, and the natural forces such as heat, light, electricity, gravitation, etc. No tribe can possibly command the complete resources of the world as regards its vegetable and its animal life, the products of agriculture and the mines. The reason for this is that the tribe is too small, and the tribe from the very nature of its constitution can not cooperate with other tribes nor receive their help. It stops at a view of nature which is a mere superstition. The tribe can climb only a little way up the ladder which leads to the control and command of all the substances and forces of nature. Consequently the tribe can not participate to any great degree either in the productive industry of the whole world or in its intellectual investigations and discoveries.

Other forms of civilization above the tribe take rank as higher or lower, according to the degree in which they realize this ideal of conquest over nature and complete intercommunication with the rest of the world. No nation that lacks a great commerce can be so high in civilization as Great Britain or France. No nation that lacks railroad communication can be so high in civilization as the United States. No nation that lacks steam engines to perform its drudgery can be so high as the nation which has these things.

Again, a nation that has no printing presses and that can not buy or read the books of the world can not be said to have a high civilization. And on this scale the nation that has the most printing, that makes the most books, and that reads the great books of the world is higher than the other nations. The ideal in this respect is that civilization should make it possible for each man to know the experience of all the past through science and literature, and that he should be able to see, through the columns of a morning newspaper, the history as it is making, day by day, in all the lands of the world.

Again, there is another criterion—a very important one. A nation may be very far advanced in its ability to control nature and to command access to the wisdom of the race. But it may do this only for some classes of its citizens and not for all. Such a nation is not so highly advanced in its civilization as one that allows each of its citizens to participate in the product of the whole. The nation that gives schools to the humblest classes of its people as well as to its highest classes, and the nation which allows the humblest people to govern themselves under just laws is a higher nation than one which separates the ruling class into a government apart from and above the mass of the people.

The highest ideal of a civilization is that of a civilization which is engaged constantly in elevating lower classes of people into participation of all that is good and reasonable, and perpetually increasing at the same time their self-activity.

Another consideration must be mentioned, namely, that with the increase of individual self-activity along the lines of science and productive industry there is an increase of creature comforts to each and every inhabitant, as well as increase of his ability to enjoy spiritual intercommunication by means of books, magazines, and newspapers.

I am aware that many persons think that an industrial civilization devoted to money-getting and the accumulation of capital is a spurious civilization, and that it is a lower stage of human society than the tribal stage and the village community. This is the reason why I am explicit on this point of the importance of a man's conquest of nature. For without this machinery for the creation of wealth and without the combination of individual savings into vast masses of capital there would not exist as there does now a bond of commerce extending around the world and uniting all peoples. For this material bond must exist before the spiritual interaction can exist which makes each nation participant in the experience of all others.

When we look at the accumulation of wealth and the combinations of capital we must see how essential they are to the conquest of nature. The inventions of any one people are converted by means of commerce into an active help to all other peoples. The ships

of the commercial marine of Great Britain help to cheapen the cost of the productions of all nations to each consumer.

The capitalist who invests \$10,000,000 in tenement houses in any city helps all of the citizens of that place to obtain better dwellings at cheaper rents. The capitalists who build railroads lower the prices of freight, and in doing this add something to the wealth of the distant producer as well as cheapen the cost to the consumer.

If you study political economy you will be able to see the progress of nations in this particular phase—the material phase of civilization. You will see nations which earn for each man, woman, and child only 3 cents a day on an average. You will find nations that earn 30 cents. The people of France earn over 40 cents for each inhabitant, and the people of Great Britain almost or quite 50 cents. The products of the United States average for each inhabitant about 52 cents per day. You have to go back only twenty-five years to find the United States product about 40 cents a day for each inhabitant. In 1850, this was less than 30 cents; and in the year 1800, before steamboats and railroads and power looms, there is no doubt that the product of the United States amounted to less than 10 cents per day for each man, woman, and child.

The amount of money earned on an average to each inhabitant of a State measures its rank of civilization so far as the conquest of nature is concerned. A nation that does not use machinery and steam engines can not afford for all its people a full participation in the world's market. A nation, like the English, that commands the most machinery will command the most comfort for its people. Thirty families out of a hundred in Great Britain report an income of \$1,000 and upward, while only three families in Italy out of each hundred report the same amount of income.

Side by side with the conquest of nature as we have seen develop the two classes of knowledge, the knowledge of nature and the knowledge of man. The mining for silver and iron and the other metals is not the only kind of mining. Civilized man is mining continually into the history of peoples, excavating buried cities and exploring their monuments and the remains of their literature and trying to discover what motives governed the civilizations of the Nile Valley and the Euphrates; and learn what was the nature of the institutions with which the people of the past governed themselves. This spiritual method of mining brings up to light human life as it was in the past, and more and more every day we come to understand how civilization has been evolved out of savagery. We can understand better and better what is our real status in our progressive development toward the ideal of civilization. And we can understand better and better our shortcomings. We can see the idea far above us and beyond us.

If we can not come into contact with lower civilizations without bringing extermination to them we are still far from the goal. It must be our great object to improve our institutions until we can bring blessings to lower peoples and set them on a road to rapid progress. We must take in hand their education. We must emancipate them from tribal forms and usages and train them into productive industry. We must take them out of the form of civilization that rests on tradition and mere external authority and substitute for it a civilization of the printed page which governs by public opinion and by insight rather than mere authority. Such a civilization we have a right to enforce on this earth. We have a right to work for the enlightenment of all peoples and to give our aid to lift them into local self-government. But local self-government can not exist where there is no basis of productive industry nor book learning.

Here we have the answer to our question. What is the right one civilization has to substitute itself in the place of another form of civilization already existing?

Major Pratt has in this Carlisle Industrial School invented a method by which the European civilization may be brought near to the Indian tribes without exterminating their brave people. He teaches the necessity of setting aside tribal life, and the adoption of a life based upon productive industry. As soon as the Indian learns the arts and trades of civilized life he can make his living in the same way that the white man does. He can live a larger life than the tribal life, because he is able through productive industry to obtain

the means by which he may enter into the consciousness of the highest civilization through the book and the daily newspaper. In this school the pupil learns reading, writing, and arithmetic—those simple tools of thought which enable the individual to learn what the human race is doing and has already done. The Indian may from day to day and year to year learn the wisdom of the race stored up for all who can read and understand the printed page. By his trade he may furnish himself food, clothing, and shelter, and he may buy books for himself, books written by the wisest of the race. This school teaches him a trade—it may be how to make shoes or harnesses, it may be how to make bread or to cook other food, it may be the trade of a carpenter, the trade of the blacksmith. He learns here the foundation of the simple trades, and he learns how to make machinery and how to direct and control it.

More than all this, he learns the political and social ideas which are most important for him, coming as he does from a tribe and with tribal ideas. He learns how to value the white man's civilization and how to prefer it to his own, dear as his own has become to him because of early association. All of the Indian's pride and self-respect, all of his bravery and individuality, may be preserved by the blessings of this school and other schools founded on its methods.

We are learning each year some new lesson regarding the capacities of the Indian for entering into the white man's civilization. On my previous visit to this school I heard the band perform a piece of Beethoven's, not only with accurate technique but with the feeling and spirit in which the piece had been written. It is astonishing to know that an individual brought up in a tribal civilization can find expression for himself in the highest musical form of art which Germany has furnished to the world. For German music with its double counterpoint can express as nothing else is able to do the deepest feelings of the heart.

I have called our civilization the white man's civilization. We have read with great interest the new and higher definition of "The white man's burden," as stated by the greatest of living poets. The white man proves his civilization to be superior to other civilizations just by this very influence which he exercises over the peoples that have lower forms of civilization—forms that do not permit them to conquer nature and make the elements into ministers of his power; forms of civilization which do not sum up for each individual the ideas of all mankind through all ages, but rather which limit him exclusively to the experience of his own tribe, and which fail to give him an understanding even of that. The graduates of this school will as citizens of this nation take up the white man's burden.

I will ask the graduating class to come upon the platform and receive their diplomas.

Members of the graduating class, allow me to congratulate you on the completion of your course in this institution. These diplomas will testify to your graduation. But your after lives will testify in a much more effective way to the reality of this fact, for if you are true to the instructions received here your lives will be a continuous progress up the ladder of civilization. You will more and more learn to direct and control matter and force, and you will more and more learn to master the deepest ideas which the thinkers and investigators of the world have left for us preserved in printed words. Through the literature, the music, the paintings, and sculptures of the world you will learn to understand the motives that have governed the lives of men—not only of white men in America, but of men of all colors in Europe, Asia, Africa and the islands of the sea. And above all let me urge upon you to study the motives of the people of Rome, those people who spoke Latin. For from them our civilization has received its forms of law by which it executes justice in the world and makes each person reap the fruit of his own deeds.

It must surprise you at first when you find that the civilization of the world is a derivative one, and not one invented by a particular nation. The highest civilization is a compound product coming from all the peoples that have lived and worked on this planet. Each nation has made some contribution to civilization, but the contributions are not all of equal value. What we get from Rome is of a very high order of value because it enables us to live with more individual freedom than under any other form of government. It enables us to allot our lands in severalty and for each head of a family to have a house or a farm for himself

and direct his own business affairs. This independence of each citizen from another is balanced by a deep sense of the solidarity of the whole, for in his political life in the state each individual devotes his property and his life for the safety of the whole. This lesson of independence within the family, and by means of private property on the one hand and of division of property and life for the safety of the whole has been taught us by Rome, and I commend to all scholarly Indian pupils at this institution a careful study of that source of our civilization.

I hope that you will all remember Major Pratt's doctrine as to the necessity of leaving tribal life and adopting a civilization founded on productive industry. But you must continue your studies in this line so that you will be ready to solve one after the other the problems which arise on your life journey. You must become the teachers of the doctrine which you have learned. You will find surprising results in studying the influence of the association of your race upon the white race. As I was looking yesterday at the military maneuvers of your highest classes I could not but think of the fact that the Indian's fight has been a skirmish fight, and not a method of fighting by phalanx or legion—that is to say, the massing of troops into solid bodies by careful discipline—and yet the white colonist in America learned from the Indian how to fight by skirmish lines. It has been suggested that the immense extension of skirmishing which developed here in the so-called French and Indian war was carried back to Europe both by the French and by the English, and under the masterly mind of Napoleon, who combined it with the method of concentrating an artillery fire upon a certain point, it became a new method of handling armies. Fighting a battle in column succeeded to the old tactics of fighting by lines. I think that you will be able to learn many particulars in which the white people of civilization have profited by the life of the Indian.

I must close my remarks to you by repeating for you the definition of civilization, a definition by which you can rightly measure and criticise the forms of civilization in which you have been trained yourselves and likewise those forms which are offered to you as substitutes—inquiring whether a civilization offers to those who embrace it the ability to know nature and the ability to apply it by labor-saving inventions so as to decrease human drudgery and at the same time increase the production of food, clothing, and shelter. You must inquire still more earnestly what means it gives to those who embrace it to enter into a possession of the experience of the race, to understand the evolution of human institutions—the family, civil society, the state, the church—and see the continuous growth of an ability on the part of each individual to participate in the fruits of all human living. And above all learn to apply the highest and the deepest of the principles of civilization, namely, the principle that makes it the highest honor of each individual to sacrifice his individual life for the lifting up of the downtrodden, the giving of light to those who sit in darkness, and the increase of self-activity and directive power on the part of each, using the means and opportunities with which each one is endowed to extend these high privileges to all.

II. ART EDUCATION THE TRUE INDUSTRIAL EDUCATION.^a

We have heard much said on the subject of industrial training in recent years. It would seem that there is no educational subject that occupies the mind of the public more extensively at the present time. There is, however, not an entire agreement among its agitators as to the exact nature of the education demanded for industry. It is the object of my paper to assist in clearing up this question of the best form of training for profitable work in the industries.

One will concede at the start that tool work is valuable as industrial training, and that especially the course of study and work in the manual-training school is valuable because

^a A paper read by W. T. Harris before the Department of Art Education, National Educational Association, Nashville, Tenn., July, 1859.

it teaches how to manufacture tools and machines of all kinds and thereby gives the laborer a sort of command over the instruments of industry that assists him very much in his struggle for excellence in the fields of labor.

Still more valuable must we regard the study of natural science, and especially of applied mathematics, in the laws of matter and motion. It furnishes the theory of all machinery and of all production of supplies from nature.

Besides this, we may claim that general education is of the utmost importance, opening, as it does, the powers of thought and observation, giving each laborer an insight into human nature and fitting him for logical thinking on all subjects; fitting him alike to lead others and combine them in extensive undertakings and likewise to serve faithfully and intelligently other leaders when the case requires. This general education is indeed indispensable to the citizen and to the best quality of industrial people.

But æsthetic education—the cultivation of taste, the acquirement of knowledge on the subject of the origin of the idea of beauty (both its historic origin and the philosophical account of its source in human nature), the practice of producing the outlines of the beautiful by the arts of drawing, painting, and modeling, the criticism of works of art with a view to discover readily the causes of failure or of success in æsthetic effects—all these things we must claim form the true foundation of the highest success in the industries of any modern nation. The dynamic side is needed, but invention of the useful does not succeed in controlling the markets of the world. A nation with its laborers all educated in their taste for beautiful forms will give graceful shapes to their productions and command higher prices for them. The graceful shape and the proper ornamentation charm the purchaser, and he willingly pays a higher price for the beautiful article of usefulness if it is made by an artist than if it is made by a mere artisan.

On another occasion I have called attention to the backward state of Swedish education in æsthetic art. Sweden is the leader in the manual-training movement, but her educators have not yet seen the importance of developing correct taste among the laborers as a condition of industrial success. Accordingly we find that ingenuity is increasing to some extent in that country, but that there is no improvement in the artistic finish and ornamentation of their goods. Clumsy shapes and incongruous ornament are the characteristics of Swedish goods. Other nations do not want such ugly shapes in sight and do not buy them. To have ugly utensils perpetually in view gradually works degeneration in one's taste. The figures of our commercial reports show that we import raw materials from Sweden, but do not buy their manufactures. In the official report of commerce and navigation of the United States for 1881 the imports from Sweden and Norway are reported as pig iron, \$111,176; bar iron, \$517,959; old and scrap iron, \$114,883; total, \$744,018; but of manufactures of iron and steel only \$111,749 are reported. It is surprising to note that we imported wood manufactures from them only to the small amount of \$137, while we imported rags for paper manufacture to the amount of \$39,090, but no manufactured clothing to speak of. The same year Belgium sent us wood manufactures to the value of \$118,146, or nearly one thousand times the value of the same item from Sweden and Norway.

In 1851, at the World's Exposition in London, it became evident that English industries were not of such a character as to compete with those of France and Belgium. Prince Albert, wise and thoughtful as he was, set about a deep-reaching system of education that should correct the national defect and recover the prestige of British arts and manufactures. The South Kensington Museum was established, and day and evening art schools set up in all manufacturing centers. The museum placed at its foundation a collection of works of art showing the history of art—its beginnings, its high-water marks, and its fluctuations. On this basis instruction was given in those forms of ornamentation that the world has pronounced beautiful. There began from this time a gradual rise in the taste of the English workman; from being an artisan pure and simple he began to be an artist. England has gone forward rapidly in the direction of producing works of taste, and her useful manufactures, heretofore made without reference to beauty, have improved in tastefulness of design and execution.

The establishment of a great national art gallery, the Louvre, and the studies of French savants in the canons of good taste had long before revolutionized French manufactures and given France the supremacy in the world market for goods that command high prices and ready sale.

Taking hint from England, we have had in this country something of the fever for education in art, especially in the lines of industrial drawing. Remarkable as has been our progress in the matter, yet there is a prevalent lack of insight into the true direction and significance of this branch of industrial drawing. We have had much stress laid on geometric drawing and the construction of working drawings, as well as the old-fashioned system of drawing pictures of objects, and we have had much invention of original designs, founded on the basis of regularity and symmetry, but we have had very little of a really high order of æsthetic.

In order to explain this statement, I ask your attention to a discussion of some general ideas on the theory of art with a view to show the object of art and its historical realization. This will help to explain to us why art exercises and has exercised so much influence in the world, and why it dominates still in the market of industrial productions. Wealth demands the æsthetic. The days of poverty may be satisfied with the useful.

Let us inquire into the scope of art and see its function, whether serious or trivial, whether elevating or degrading to the soul. Let us study it, in short, in its relations to religion as well as in its relations to industry, because only in this serious aspect can it justify for itself its high place in the esteem of mankind.

There is the theory that the primary function of art is amusement. What makes this degrading theory plausible is the fact that there is sensuous enjoyment in the contemplation of works of art. But if we analyze this effect we shall trace even it to something higher than sensuous sources.

The sensuous elements in art are regularity, symmetry, and harmony.

1. *Regularity* is recurrence of the same—mere repetition. A rude people scarcely reaches a higher stage of art. The desire for amusement is gratified by a string of beads or a fringe of some sort. It is a love of rhythm. The human form divine does not seem beautiful to the savage. It is not regular enough to suit his taste. He must accordingly make it beautiful by regular ornaments, or by deforming it in some way; by tattooing it, for example.

Why does regularity please? Why does recurrence or repetition gratify the taste of the child or savage? The answer to this question is to be found in the generalization that the soul delights to behold itself, and that human nature is "mimetic," as Aristotle called it, signifying symbol-making. Man desires to know himself and to reveal himself, in order that he may comprehend himself; hence, he is an art-producing animal. Whatever suggests to him his deep, underlying spiritual nature gives him a strange pleasure. The nature of consciousness is partly revealed in types and symbols of the rudest art. Chinese music, like the music of very young children, delights in monotonous repetitions that almost drive frantic anyone with a cultivated ear. But all rhythm is a symbol of the first and most obvious fact of conscious intelligence or reason. Consciousness is the knowing of the self by the self. There is subject and object, and the activity of recognition. From subject to object there is distinction and difference, but with recognition sameness or identity is perceived, and the distinction or difference is retracted. What is this simple rhythm from difference to identity but regularity. It is, we answer, regularity, but it is much more than this. But the child or savage delights in monotonous repetition alone, not possessing the slightest insight into the cause of his delight. His delight is, however, explicable through this fact of the identity in form between the rhythm of his soul-activity and the sense-perception by which he perceives regularity.

The sun-myth arises through the same feeling. Wherever there is repetition, especially in the form of return-to-itself, there comes this conscious or unconscious satisfaction at beholding it. Hence, circular movement, or movement in cycles, is the most wonderful of all the phenomena beheld by primitive man. Nature presents to his observation infinite differences. Out of the confused mass he traces some forms of recurrence—day and night, the

phases of the moon, the seasons of the year, genus and species in animals and plants, the apparent revolutions of the fixed stars, and the orbits of planets. These phenomena furnish him symbols or types in which to express his ideas concerning the divine principle that he feels to be First Cause. To the materialistic student of sociology all religions are merely transfigured sun-myths. But to the deeper student of psychology it becomes clear that the sun-myth itself rests on the perception of identity between regular cycles and the rhythm which characterizes the activity of self-consciousness. And self-consciousness is felt and seen to be a form of being that is not on a par with mere transient, individual existence, but rather the essential attribute of the divine being, Author of all.

Here we see how deep-seated and significant is this blind instinct or feeling which is gratified by the seeing and hearing of mere regularity. The words which express the divine in all languages root in this sense-perception and æsthetic pleasure attendant on it. Philology, discovering the sun-myth origin of religious expression, places the expression before the thing expressed, the symbol before the thing signified. It tells us that religions arise from a sort of disease in language which turns poetry into prose. But underneath the æsthetic feeling lies the perception of identity which makes possible the trope or metaphor.

2. *Symmetry.* Regularity expresses only the empirical perception of the nature of self-consciousness and reason. There is, as we have seen, a subject opposed to itself as object. Opposition or antithesis is, however, not simple repetition, but opposition. The identity is therefore one of symmetry, instead of regularity. Symmetry contains and expresses identity under difference. We can not put the left-hand glove on our right hand. The two hands correspond, but are not repetitions of the same. It is a mark of higher æsthetic culture to prefer symmetry to regularity. It indicates a deeper feeling of the nature of the divine. Nations that have reached this stage show their taste by emphasizing the symmetry in the human form by ornaments and symmetrical arrangement of clothing. They correct the lack of symmetry in the human form in the images of their gods. The face is on the front side of the head, but the god shall have a face on the back of his head, too, to complete the symmetry. The arms directed to the front of the body must also correspond to another pair of arms directed in the opposite direction. Perhaps perfect symmetry is still more exacting in its requirements, and demands faces with arms to match on the right and left sides of the body. To us the idols of the ancient Mexicans and Central Americans seem hideous. But it was the taste for symmetry that produced them.

3. *Harmony* is the object of the highest culture of taste. Regularity and symmetry are so mechanical in their nature that they afford only remote symbols of reason in its concreteness. They furnish only the elements of art, and must be subordinated to a higher principle. Harmony is free from the mechanical suggestions of the lower principles, but it possesses in a greater degree the qualities which gave them their charm. Just as symmetry exhibits identity under a deeper difference than regularity, so harmony, again, presents us a still deeper unity underlying wider difference. The unity of harmony is not a unity of sameness, nor of correspondence merely, but a unity of adaptation to end or purpose. Mere symmetry suggests external constraint; but in art there must be freedom expressed. Regularity is still more suggestive of mechanical necessity. Harmony boldly discards regularity and symmetry, retaining them only in subordinate details, and makes all subservient to the expression of a conscious purpose. The divine is conceived as spiritual intelligence elevated above its material expression so far that the latter is only a means to an end. The Apollo Belvedere has no symmetry of arrangement in its limbs, and yet the disposition of each limb suggests a different disposition of another, in order to accomplish some conscious act upon which the mind of the god is bent. All is different, and yet all is united in harmony for the realization of one purpose. Here the human form, with its lack of regularity and symmetry, becomes beautiful. The nation has arrived at the perception of harmony, which is a higher symbolic expression of the divine than were the previous elements. The human body is adapted to the expression of conscious will, and this is freedom. The perfect subordination of the body to the will is gracefulness. It is this which constitutes the beauty of classic art: To have every muscle under

perfect obedience to the will—unconscious obedience—so that the slightest inclination or desire of the soul, if made an act of the will, found expression in the body. When the soul is not at ease in the body, but is conscious of it as something separate, gracefulness departs and awkwardness takes its place. The awkward person does not know what to do with his hands and arms; he can not think just how he would carry his body or fix the muscles of his face. He chews a stick or bites a cigar in order to have something to do with the facial muscles, or twirls a cane or twists his watch chain, folds his arms before or behind, or even thrusts his hands into his pockets, in order to have some use for them which will restore his feeling of ease in his body. The soul is at ease in the body only when it is using it as a means of expression or action.

Harmony is this agreement of the inner and outer, of the will and the body, of the idea and its expression, so that the external leads us directly to the internal of which it is the expression. Gracefulness then results, and gracefulness is the characteristic of classic or Greek art. Not only its statues, but its architecture and architectural ornament, exhibit gracefulness or freedom.

The Greek religion made beauty the essential feature of the idea of the divine, and hence his art is created as an act of worship of the beautiful. It represents the supreme attainment of the world in pure beauty, because it is pure beauty and nothing beyond. Christianity reaches beyond beauty to holiness. Other heathen religions fall short of the Greek ideal, and lack an essential element which the Greek religion possessed. The Greeks believed that the divine is at the same time human; and human not in the sense that the essence of man, his purified intellect and will, is divine, but human in the corporeal sense as well. The gods of Olympus possess appetites and passions like men; they have bodies and live in a special place. They form a society or large patriarchal family. The manifestation of the divine is celestial beauty. Moreover, the human being may by becoming beautiful become divine. Hence the Greek religion centers about gymnastic games. These are the Olympian, the Isthmean, the Nemean, and the Pythian games. Exercises that shall give the soul sovereignty over the body and develop it into beauty are religious in this sense. Every village has its games for physical development; these are attended by the people who become in time judges of perfection in human form, just as a community that attends frequent horse races produces men that know critically the good points of a horse. It is known who is the best man at wrestling, boxing, throwing the discus, the spear, or javelin; at running, at leaping, or at the chariot or horseback races. Then, at less frequent intervals, there is the contest at games between neighboring villages. The successful hero carries off the crown of wild olive branches. Nearly every year there is a great national assembly of Greeks and a contest open to all. The Olympian festival at Olympia and the Isthmean festival near Corinth are held the same summer; then at Argolis, in the winter of the second year afterwards, is the Nemean festival; then the Pythian festival near Delphi, and a second Isthmean festival, occur in the spring of the third year; and again there is a second Nemean festival in the summer of the fourth year of the Olympiad. The entire people, composed of independent States, united by ties of religion, assemble to celebrate this faith in the beautiful and honor their successful youth. The results carried the national taste for the beautiful as seen in the human body to the highest degree.

The next step after the development of the personal work of art in the shape of beautiful youth, by means of the national games and the cultivation of the taste of the entire people through the spectacle of these games, is the art of sculpture, by which these forms of beauty, realized in the athletes and existing in the minds of the people as ideals of correct taste, shall be fixed in stone and set up in the temples for worship. Thus Greek art was born. The statues at first were of gods and demigods exclusively. Those which have come down to us cause our unbounded astonishment at this perfection of form. It is not their resemblance to living bodies, not their anatomical exactness that interests us, not their so-called "truth to nature," but their gracefulness and serenity—their "classic

repose." Whether the statues represent gods and heroes in action or in sitting and reclining postures, there is this "repose" which means indwelling vital activity and not mere rest as opposed to movement. In the greatest activity there is considerate purpose and perfect self-control manifested. The repose is of the soul, and not a physical repose. Even sitting and reclining figures—for example, the Theseus from the Parthenon, the torso of the Belvedere—are filled with activity, so that the repose is one of voluntary self-restraint and not the repose of the absence of vital energy. They are gracefulness itself.

What a surprising thought is this, of a religion founded on beauty! How could it have arisen in the history of the world, and what became of it? Let us consider a few of the elements wherein the Greek religion was superior to other heathen religions.

The Hindoo worshiped an abstract unity devoid of all form, which he called Brahma. His idea of the divine is defined as the negation not only of everything in nature, but also everything human. Nothing that has form, or shape, or properties, or qualities—nothing, in short, that can be distinguished from anything else, can be divine according to the thought of the Hindoo. This is pantheism. It worships a negative might which destroys everything. If it admits that the world of finite things arises from Brahma as creator, it hastens to tell us that the creation is only a dream and that all creatures will vanish when the dream fades. There can be no hope for any individuality, according to this belief. Any art that grows up under such a religion will manifest only the nothingness of individuality and the impossibility of its salvation. Instead of beauty as the attribute of divinity, the Hindoo studied to mortify the flesh; to shrivel up the body; to paralyze rather than develop his muscles. Instead of gymnastic festivals he resorted to the severest penances, such as holding his arm over his head until it wasted away. If he could produce numbness in his body so that all feeling disappeared, he attained holiness. His divine was not divine-human, but inhuman rather.

The Egyptian laid all stress on death. In his art he celebrated death as the vestibule to the next world and the life with Osiris. Art does not get beyond the symbolic phase with him. As in the hieroglyphic the picture of a thing is employed at first to represent the thing, and by and by it becomes a conversational sign for a word, so the works of art at first represent men and gods, and afterwards become conventional symbols to signify the ideas of the Egyptian religion. The great question to be determined is this: What destiny does it promise the individual, and what kind of life does it command him to lead? The Egyptian symbolizes his divine by the processes of nature that represent birth, growth and death, and resurrection, and hence conceive life as belonging to it. The course of the sun—its rising and setting, its noonday splendor, and its nightly eclipse; the succession of the seasons—the germination, growth, and death of plants; the flooding and subsidence of the Nile—these and other phenomena are taken as symbols expressing the Egyptian conception of the divine living being. Finally it rises out of the immediate artistic description by symbols, and tells the myth of Osiris killed by his brother Typhon, and of his descent to the silent realm of the under-world, and of his there reigning king, and of his resurrection.

The Indian art, on the contrary, dealt with symbols that were not analogous to human life. They revered mountains and rivers and the storm winds and great natural forces that were destructive to the individuality of man, but also revered life in animals. They founded asylums for aged cows, but not for decrepit humanity.

Persian art adored light as the divine; it also adored the bodies that give light—the sun, moon, and stars; also fire; also whatever is purifying, especially water. The Persian religion conceives two deities—a god of light and goodness and a god of darkness and evil. The struggle between these two gods fills the universe and makes all existence a contest. The art of the Persian portrays this struggle, and does not let pure human individuality step forth for itself.

In Assyria and Chaldea we have the worship of the sun rather than of pure light. Hence there were artificial hills or towers constructed, with ascending inclined planes on the outside

rising to the flat top, crowned with a temple dedicated to Belus or the Sun god. Images partly human, partly animal, represented the divine. The lion, the eagle, the quadruped and bird, the human face, these were united to make the symbol of a divine being who could not be manifested in a purely human form.

The Egyptian religion, though it surpassed the Persian in that it conceived the divine as much more near human life, still resorted to animal forms to obtain the peculiarly divine attributes. There were the sacred bulls Apis and Mnevis, the goat of Mendes, sacred hawks and ibis, and such divinities as Isis-Hathor, with a cow's head; Touaris, with a crocodile's head; Thoth, with the head of an ibis; Horus, with the head of a hawk; but Ammon and Ptha and Osiris with human heads and bodies. Thus we see that the Egyptian wavered between the purely human and the animal form as the image of the divine. So long as it is possible for a religion to permit the representation of the divine by an animal form, that religion has not yet conceived God as pure self-consciousness or reason. Its art can not arrive at gracefulness. As a consequence of this defect, however, it can not account for the origin and destiny of the world in such a way as to explain the problem of the human soul. It is an insoluble enigma whose type is a sphinx. The Sphinx is the rude rock out of which it arises, symbolizing inorganic nature; then the lion's body, typifying by the king of beasts the highest of organic beings below man; then the human face, looking up inquiringly to the heavens. Its question seems to be: "Thus far: what next?" Does the human break the continuity of the circle of nature within which there goes on a perpetual revolution of birth, growth, and decay, or does the human perish with the animal and plant and lose his individuality? How can his individuality be preserved without the body? The Egyptian's highest thought was this enigma. He combined the affirmative and negative elements of this problem, conceiving that man survives death but will have a resurrection and need his particular body again, which therefore must be preserved by embalming it. The body of Osiris had to be embalmed by Isis. The sacred animals, bulls and others, were embalmed upon death.

They had not learned that the image of God is man, and, more definitely, man's reason or self-consciousness. It was a great step beyond the heathen religion of Asia and Africa therefore for the Greek religion to conceive the divine as dwelling in human form, however defective it was in respect to its doctrine of the particular attributes of man that are the true image of God. Hence we have the explanation why it is that Greek art has become the conventional expression of the beautiful for all the civilized world. It alone aims at the expression of personal freedom in the body and therefore always achieves gracefulness. Christian art as such strives to show the soul as struggling to free itself from the body. All cultivated peoples will prefer ornament and works of art that show the triumph of the soul over matter to the manifestation of the predominance of matter or the struggle of the soul to free itself. Art studies should therefore find their center in the history of Greek art.

III.—THE INTELLECTUAL VALUE OF TOOL WORK.^a

Man, like the animal, has natural wants, which he must gratify in order to live on the earth. While the animal needs food, and to some extent shelter, man needs food and shelter and clothing. In order to get possession of these things he must struggle for them and wrest them from nature, depriving plants and animals of their vital principles and converting them to his own uses. Whereas the plant feeds upon soil and atmosphere in so far as it finds them in immediate contact with itself, and the animal is able to seek a new environment and use its limbs as tools or instruments with which to seize upon the means of supplying its wants, man on the other hand, although less endowed with strength

^a A paper read by W. T. Harris before the National Educational Association, in Nashville, Tenn., July 15, 1889.

than many of the animals, and with scanty natural provision for clothing, yet is able to surpass the animal in gratification of his wants, by cunningly aiding his natural forces and instruments by invented ones. He devises instruments out of natural materials, mineral, animal, and vegetable substances and their chemic elements, of such efficiency as to enable him to command the resources of land and sea and air.

Whatever seems at first a limitation to him, or a hostile might threatening him with destruction, or imposing upon him the necessity of drudgery for daily assistance, becomes by and by an auxiliary power friendly to man after he has conquered it by the magic of his intellect.

Man, as inventor of tools and machines and the combiner of nature's forces, presents for us the most interesting object in the universe. Let us take a survey of him as the maker of tools and the wielder of them. Intellectual and moral power unite to give man this power of invention. It is intellectual cunning which discovers the powers and adaptations of things and converts them to his uses. It is the moral power of self-conquest that enables man to sacrifice the ease and comfort of the present moment and to endure privation, in order by industry and patient attention to accumulate a capital of physical means and acquired experience sufficient to produce an invention.

The first step above the brute instinct begins when man looks beyond things as he sees them existing before him and commences to consider their possibilities; he begins to add to his external seeing an internal seeing; the world begins to assume a new aspect; each object appears to be of larger scope than its present existence, for there is a sphere of possibility environing it, a sphere which the sharpest animal eyes of lynx or eagle can not see, but which man, endowed with this new faculty of inward sight, perceives at once. To this insight into possibilities there loom up uses and adaptations, transformations and combinations in a long series stretching into the infinite behind each finite real thing. The bodily eyes see the real objects, but can not see the infinite trails; they are invisible except to the inward eyes of the mind.

What we call directive power on the part of man, his combining and organizing power, all rests on this power to see beyond the real things before the senses to the ideal possibilities invisible to the brute. The more clearly man sees these ideals the more perfectly he can construct for himself another set of conditions than those in which he finds himself.

Men as tool workers, as managers of machines, participate in this higher kind of perception in different degrees, but all have it to some extent. The lowest human laborer has the dimmest notions of these ideals; they are furnished him by others; he is told what to do; he furnishes the hands to work with and someone else furnishes the brains or most of the brain work. Unless a directing mind is near by to help at every moment with the details of some ideal, the rude laborer ceases his work, having no knowledge of what is required next. His capacity to grasp an ideal is very small; he can only take it in tiny fragments—small patterns dealt out to him as a hand by the directing brain of the overseer or "boss."

It seems a waste of power to have two brains to govern one pair of hands. It is evidently desirable to have each laborer developed in his brain, so as to be able to see ideals as well as to realize them by his hands.

The development of this desirable power we call education of the intellect, and its chief means is science. Science is the systematized results of observation. Each fact in the world is placed in the light of all the other facts. All facts are made to help explain each fact. This is science. Now, each fact represents only one of the many possible states of existence which a thing may have. When one state of existence is real the others are mere possibilities, or, as they are called, "potentialities." Thus water may exist as liquid, or vapor, or ice, but when it is ice the liquid and vapor states are mere potentialities.

Science collects about each subject all its phases of existence under different conditions; it teaches the student to look at a thing as a whole and see in it not only what is visible before his senses, but what also is not realized and remains dormant or potential. The

scientifically educated laborer, therefore, is of a higher type than the mere "hand laborer," because he has learned to see in each thing its possibilities. He sees each thing in the perspective of its history. Here, then, in the educated laborer we have a hand belonging to a brain that directs, or that can intelligently comprehend a detailed statement of an ideal to be worked out. The laborer and the "boss" are united in one man.

There are, as we have said, different degrees of educated capacity, due to the degree in which this power of seeing invisible potentialities or ideals is developed. The lowest humanity needs constant direction and works only under the eye of an overseer; it can work with advantage only at simple processes; by repetition it acquires skill at a simple manipulation. The incessant repetition of one muscular act deadens into habit and less and less brain work goes to its performance. When a process is reduced to simple steps, however, it is easy to invent some sort of machine that can perform it as well or better than the human drudge. Accordingly, division of labor gives occasion to labor-saving machinery. The human drudge can not compete with the machine and is thrown out of employment and goes to the almshouse or perhaps starves. If he could only be educated and learn to see ideals, he could have a place as manager of the machine. The machine requires an alert intellect to direct and control it, but a mere "hand" can not serve its purpose. The higher development of man produced by science therefore acts as a goad to spur on the lower orders of humanity to become educated intellectually. Moreover, the education in science enables the laborer to easily acquire an insight into the construction and management of machines. This makes it possible for him to change his vocation readily. There is a greater and greater resemblance of each process of human labor to every other now that an age of machinery has arrived. The differences of manipulation are grown less, because the machine is assuming the handwork and leaving only the brain work for the laborer. Hence there opens before labor a great prospect of freedom in the future. Each person can choose a new vocation and succeed in it without long and tedious apprenticeship, provided that he is educated in general science.

If he understands only the theory of one machine, he may direct or manage any form or style of it. He could not so easily learn an entirely different machine unless he had learned the entire theory of machinery. The wider his knowledge and the more general its character, the larger the sphere of his freedom and power. If he knows the scientific theory of nature's forces, he comprehends readily not only the machines, but also all nature's phenomena as manifestations of those forces. Knowledge is educative in proportion to its enlightening power or its general applicability. The knowledge of an art is educative because it gives one command in a sphere of activity; it explains effects and enables the artisan to be both brain and hand to some extent. A science lifts him to a much higher plane educatively, because he can see a wide margin of possibilities or ideals outside of the processes in use, and outside of the tools and machines employed.

Education, then, takes these three steps: First, to do what is directed by authority; secondly, to know the theory of the art or trade as it is and has come down by tradition; thirdly, to know the general science of the subject, and comprehend not only the processes that have been realized, but the possibility of others.

The civilization in which we live is well characterized as a scientific one, and it is making great strides toward the conquest of nature. It demands, too, as we see, an education for all people. There is less and less place left for the mere drudge—all hands and no brains. Machinery can do his work so cheaply that his wages must be very slender. The education demanded, moreover, is not the training in technical skill so much as in science. For the more general training emancipates the laborer from the deadening effects of repetition and habit, the monotony of attending the machine, and opens up a vista of new invention and more useful combinations.

While the student is learning a method of doing something his brain is exercised; when the process has become a habit, it is committed to his hand, and his intellect is not required again except for new combinations. This is true of all machine work, of all tool work. Its theory

is soon exhausted, and the deadening process of habit sets in. Science is perpetually living, always educative. The mind goes from principle to principle; it discovers and inventories new provinces of nature, and applies its principles to their explanation. In reaching vaster unities of nature, it finds deeper principles.

Not the study of tools and machinery, but that of natural science, is more educative, therefore, because it keeps the mind in perpetual activity.

If we pause here and ask ourselves, What is the scope of the inquiry thus far made? we shall be obliged to confess that we have regarded man only in his animal nature—possessing bodily wants of food, clothing, and shelter. We see at once that this is no inventory of man's wants—it falls infinitely short of his requirements as a spiritual being. If machinery were invented so that he could get food, clothing, and shelter in abundance and of the finest quality at the cost of a moment's labor each day, all this would be of small account as an item of civilization unless the human energy saved from drudgery had found channels of expenditure in the vocations relating directly to the education of the spiritual nature of man.

Here we come to the all-important distinction between that which belongs only to the nature of a means instrumental to something else different from itself, and that which is an end for itself. The human mind or soul is an end for itself. Matter and the body are only instrumental, only means for the perfection of the soul.

What, we inquire, are the ideals of perfection of the soul, then? For it would seem that all through our industrial processes there should have prevailed a guiding purpose to subordinate all human endeavor to the interest of the mind. We have already taken note of the science of nature as a purely theoretical study, more educative than any form of art because it is the source of inexhaustible activity in the intellect. Nature in time and space is one world for man's scientific mastery. Over against this there is another world for his science—the world of mind.

Nature is before us as organic and inorganic realms. Mind reveals itself in three forms—thinking, willing, and feeling. Leaving this psychological point of view, it will be more interesting for us to look at the world of humanity in three aspects. Human nature has revealed itself in institutions, social structures organized so as to make the strong help the weak; the mature assist the immature; the wise the simple. These institutions are the family, civil society, the state or nation, and the church. These institutions are the outgrowth of the human will: In the business of education the youth learns human nature as will in studying history—history taken in a very broad sense. But even history in a narrow sense gives him glimpses of all these institutions acting and reacting upon each of these. One sees the evolution of civilization by the study of history. Here, then, is a branch of study which we must regard as educative in the highest possible degree. Natural science, valuable as it is in emancipating us from drudgery, is rather a science of that which is a means for the development of man as a spiritual being. But history is a science of that which is an end for itself, because it is the exhibition of the structure and evolution of civilization.

History is only one of the spiritual sciences. There are sciences that relate to mind as intellect in its essence, such as philosophy and psychology and logic, with kindred sciences like comparative philology offering to us the revelations which different peoples of the earth have made of their mental structure in language. This study deals also with that which is an end for itself. Again, there is the department of literature and art, in which man has portrayed for himself his human nature in the form of feelings and convictions leading outward and upward to thoughts and actions. For the heart is in a certain sense the primitive fountain from which flows the life-thread before it is divided into the strands of intellect and will. Literature shows us this deepest source of civilization. Homer, Dante, Shakespeare, and Goethe reveal prophetically what after ages work out into clear thoughts and actions. Here then is another, and a very important, study of what is always an end for itself.

History, the revelation of the nature of human will; philology and philosophy, the revelation of what is essential in the human intellect, or the divine part of it; literature and the fine arts, the revelation of the human heart!

First, human nature evolves a dim feeling; then develops it into an idea; then realizes it in a deed, and it becomes an institution to bless the race.

There are three departments to the world of human nature, and two departments to the world of nature below man—organic in plant and animal, inorganic in matter and force.

With this survey of human learning, we are now prepared to see what the school has done in the past and present to provide an educative process for the child by giving him a survey of the two worlds in which he lives, the material and spiritual worlds—the world of means to an end outside of itself, and the world which is an end for itself.

School education should open five windows of the soul, and let it look out upon the two departments of nature and the three departments of mind. Now it surprises us at first to see that school education has done this very thing by its course of study. Arithmetic gives the first glimpse of inorganic nature, for it reveals the nature of quantity, and quantity gives the law to time and space, and to all bodies. Then in geography a glimpse is given of organic nature as related to the inorganic on the one hand, and as related to man on the other—a very educative study indeed! Then there is grammar, which looks into the logical structure of the intellect as revealed in language; history, which reveals the human will; literature in the school readers, showing how the great geniuses of the language have revealed the aspirations of the people in impassioned prose and poetry.

The school does something more than give this all-round glimpse of man's fivefold world. The school teaches the pupil how to restrain his animal impulses to prate and chatter, disturbing the work of others, and himself idle; it teaches him the great lesson of industry and perseverance; it teaches him regularity and punctuality, the great virtues that lie at the basis of all human combination; it teaches courtesy and good social behavior; it lays greatest stress on truth-speaking, by showing the pupil in every recitation how important it is to be accurate in statement, and to fix the exact facts by verification and research.

The studies and disciplines of the school therefore open the windows of the intellect upon all points of the horizon of existence, and they train the will to labor at what is most difficult because most unusual for the animal nature. The lower organized human being can work with his hands with pleasure, while it is still a task of great difficulty for him to contemplate ideas or undertake any sustained trains of thought. If youth can be taught to bring their powers to bear on such ideal subjects as arithmetic, grammar, history, and literature, they certainly can with ease give their minds to any form of manual training or the work of external observation, because the greater includes the less, and the studies of pure science are far more difficult to carry on than studies in applied science.

If we now ask the question, What is the comparative value of tool work? we may see our way to reply, Tool work without the theory of construction is educative to some extent, especially in the first stages of its practice. Tool work taught with the theory of machinery, with applied mathematics, is far more educative than mere tool work, and its educative influence lasts for a much longer time. Tool work with its theory and with natural science is permanently educative, and it does much to raise manual labor above drudgery, and especially is this the case if it is studied with the history of ornamentation and with careful cultivation of æsthetic taste.

But when compared with the present course of study in the schools it can not be claimed that manual training opens any new windows of the soul, although it may give a more distinct view from the window that opens toward inorganic nature.

There remains, notwithstanding, a permanently valid place for the manual-training school side by side with apprentice schools for all youths who are old enough to enter a trade, and who are unwilling to carry on any further their purely culture studies. Cultivate the humanities first, and afterwards the industrial faculties. In our civilization there ascend

out of the abyss of the future problems of anarchy on the one hand and of socialism on the other; individualism carried to such extremes that all subordination to peaceable and established law is deemed a fetter to freedom. This centrifugal tendency to anarchy is paralleled by a centripetal tendency that wishes to have the central government perform not only all the duties of establishing justice and securing the public peace, but also to have it own all the property and manage all the industries. In short, the nationalists propose abolishing the sphere of competition and individual enterprise. Education in the history of the world, and in the literature that reveals the aspirations of the human heart, is well calculated to prepare the youth for a rational verdict on the extreme issues that will continually arise among a free people. Above all, we must never yield to the economic spirit that proposes to curtail the humanizing studies in our schools for the sake of adding special training for industries. Rather must we do what we can to extend the period of study in pure science and the humanities, knowing as we do that all which goes to develop the ability of the youth to see possibilities and ideals, goes to make him a more productive laborer in the fields of industry.

CHAPTER XIX.

LIST OF EDUCATIONAL PERIODICALS IN THE UNITED STATES IN 1904.

(1) ARRANGED BY STATES.

Alabama.

Birmingham, Educational Exchange, M., 1904, vol. 19.
Huntsville, The Educator, M., 1904, vol. 6.
Tuskegee, Southern Letter, M., 1904, vol. 20.

Arkansas.

Little Rock, Arkansas School Journal, M., 1904, vol. 9.

California.

Berkeley, University Chronicle, Bi-m., 1904, vol. 7.
San Francisco, Western Journal of Education, M., 1904, vol. 9.

Colorado.

Denver, Colorado School Journal, M., 1904, vol. 20.
Greeley, State Normal School Bulletin, M., 1904, vol. 3.

Connecticut.

New Haven, Yale Review, M., 1904, vol. 13.

District of Columbia.

Washington, American Annals of the Deaf, Bi-m., 1904, vol. 50.
Washington, Catholic University Bulletin, Qu., 1904, vol. 10.
Washington, National Geographical Magazine, M., 1904, vol. 15.
Washington, University Courier, Qu., 1904, vol. 11.

Florida.

Gainesville, Florida School Exponent, M., 1904, vol. 12.

Illinois.

Bloomington, School and Home Education, M., 1904, vol. 24.
Chicago, Biblical World, M., 1904, vol. 23.
Chicago, Board of Education Bulletin, W., 1904, vol. 2.
Chicago, Correct English, M., 1904, vol. 4.
Chicago, Dial (The), Semi-m., 1904, vol. 36.
Chicago, Elementary School Teacher, M., 1904, vol. 5.
Chicago, Home Education, M., 1904, vol. 2.
Chicago, Journal of Geography, M., 1904, vol. 4.
Chicago, Kindergarten Magazine, M., 1904, vol. 17.

Illinois—Continued.

Chicago, Manual Training Magazine, Qu., 1904, vol. 6.
Chicago, School Review, M., 1904, vol. 12.
Chicago, School Science, M., 1904, vol. 4.
Chicago, Teachers' Federation Bulletin, W., 1904, vol. 4.
Chicago, The Commons, M., 1904, vol. 9.
Chicago, University Record, M., 1904, vol. 9.
Chicago, University Extension Quarterly, Qu., 1904, vol. 2.
Oak Park, Intelligence, Semi-m., 1904, vol. 24.
Taylorville, School News and Practical Educator, M., 1904, vol. 18.

Indiana.

Indianapolis, Educator-Journal, M., 1904, vol. 5.

Iowa.

Charles City, Iowa Teacher, M., 1904, vol. 18.
Des Moines, Midland Schools, M., 1904, vol. 18.
Fort Dodge, Webster County Teacher, M., 1904, vol. 14.
Keokuk, School Music Monthly, M., 1904, vol. 5.

Kansas.

Hutchinson, Kansas Educator, M., 1904, vol. 2.
Lawrence, Kansas University Science Bulletin, Qu., 1904, vol. 2.
Manhattan, Industrialist (The), W., 1904, vol. 31.
New Albany, Country School Champion, M., 1904, vol. 8.
Topeka, Western School Journal, M., 1904, vol. 21.

Kentucky.

Berea, Berea Quarterly, Qu., 1904, vol. 9.
Lexington, Southern School Journal, M., 1904, vol. 15.

Louisiana.

New Orleans, Teachers' Outlook, M., 1904, vol. 5.

Maine.

Farmington, Normal (The), M., 1904, vol. 3.

Maryland.

Baltimore, Johns Hopkins University Circular, M., 1904, vol. 23.

Massachusetts.

- Boston, American Primary Teacher, M., 1904, vol. 23.
 Boston, Bostonia, Qu., 1904, vol. 5.
 Boston, Boston Cooking-School Magazine, Bi-m., 1904, vol. 9.
 Boston, Education, M., 1904, vol. 25.
 Boston, Home Science Magazine, M., 1904, vol. 21.
 Boston, Journal of Education, W., 1904, vol. 60.
 Boston, Literary World, Semi-m., 1904, vol. 35.
 Boston, New England Conservatory Magazine, M., 1904, vol. 10.
 Boston, Popular Educator, M., 1904, vol. 21.
 Boston, Posse Gymnasium Journal, M., 1904, vol. 12.
 Boston, Primary Education, M., 1904, vol. 12.
 Boston, School Physiology Journal, M., 1904, vol. 14.
 Boston, Technological Quarterly, Qu., 1904, vol. 17.
 Cambridge, The People, Qu., 1904, vol. 7.
 Salem, Little Folks, M., 1904, vol. 8.
 Springfield, Kindergarten Review, M., 1904, vol. 15.
 Worcester, American Journal of Psychology, Qu., 1904, vol. 16.
 Worcester, American Journal of Religious Psychology and Education, Qu., 1904, vol. 1.
 Worcester, School Arts Book, M., 1904, vol. 4.
 Worcester, Pedagogical Seminary (The), Qu., 1904, vol. 11.

Michigan.

- Battle Creek, Good Health, M., 1904, vol. 39.
 Lansing, Moderator-Topics, Semi-m., 1904, vol. 25.

Minnesota.

- Minneapolis, School Education, M., 1904, vol. 23.
 Minneapolis, Minnesota School Journal, M., 1904, vol. 4.

Missouri.

- Jefferson City, Missouri School Journal, M., 1904, vol. 21.
 St. Louis, Evangelisch-Lutherisches Schulblatt, M., 1904, vol. 39.

Nebraska.

- Lincoln, Nebraska Teacher, M., 1904, vol. 7.
 Omaha, Nebraska Mute Journal, M., 1904, vol. 32.
 Santee Agency, Word Carrier, M., 1904, vol. 33.

New Hampshire.

- Manchester, Notes and Queries, M., 1904, vol. 22.

New Jersey.

- Ringoes, Journal of Orthoepe and Orthografi, M., 1904, vol. 21.
 Trenton, Silent Worker (The), M., 1904, vol. 17.

New York.

- Albany, American Education from Kindergarten to College, M., 1904, vol. 8.
 Brooklyn, American Physical Education Review, Qu., 1904, vol. 9.
 Brooklyn, Latin Leaflet, W., 1904, vol. 5.
 Chautauqua, Assembly Herald, D. during summer, 1904, vol. 29.

New York—Continued.

- Dansville, Normal Instructor and Teachers' World, M., 1904, vol. 14.
 Malone, Mentor (The), M., 1904, vol. 10.
 New York, American Geographical Bulletin, M., 1904, vol. 36.
 New York, American School Board Journal, M., 1904, vol. 29.
 New York, Champlain Educator, Qu., 1904, vol. 23.
 New York, Charities, W., 1904, vol. 13.
 New York, Columbia University Quarterly, Qu., 1904, vol. 7.
 New York, Deaf Mutes' Journal, W., 1904, vol. 33.
 New York, Educational Foundations, M., 1904, vol. 16.
 New York, Educational Review, M., 1904, vol. 28.
 New York, Ethical Record, Bi-m., 1904, vol. 5.
 New York, Journal of Mental Pathology, M., 1904, vol. 6.
 New York, Literary Digest, W., 1904, vol. 29.
 New York, Nature Study Review, M., 1905, vol. 1.
 New York, New Education, M., 1904, vol. 17.
 New York, Penman's Art Journal, M., 1904, vol. 29.
 New York, Pitman's Phonetic Journal, W., 1904, vol. 62.
 New York, Pitman's Shorthand Weekly, W., 1904, vol. 28.
 New York, Pratt Institute Monthly, M., 1904, vol. 13.
 New York, Primary School, M., 1904, vol. 14.
 New York, Psychological Bulletin, M., 1904, vol. 1.
 New York, Psychological Review, M., 1904, vol. 11.
 New York, School, W., 1904, vol. 16.
 New York, School Journal, W., 1904, vol. 69.
 New York, School, Work, Qu., 1904, vol. 3.
 New York, Sunday School Journal, M., 1904, vol. 36.
 New York, Teachers' College Record, M., 1904, vol. 5.
 New York, Teachers' Institute, M., 1904, vol. 27.
 Syracuse, Craftsman (The) M., 1904, vol. 7.
 Syracuse, Journal of Pedagogy, Qu., 1904, vol. 17.
 Syracuse, School Bulletin, M., 1904, vol. 31.

Ohio.

- Athens, Ohio Teacher, M., 1904, vol. 25.
 Cincinnati, Our Companion, M., 1904, vol. 15.
 Cincinnati, Phonographic Magazine, M., 1904, vol. 18.
 Cincinnati, Public School Journal, M., 1904, vol. 44.
 Columbus, Ohio Chronicle (for Deaf and Dumb), W., 1904, vol. 37.
 Columbus, Ohio Educational Monthly, M., 1904, vol. 53.
 Springfield, Chautauquan (The), M., 1904, vol. 40.

Oklahoma.

- Oklahoma City, School Herald, M., 1904, vol. 13.

Oregon.

- Salem, Oregon Teachers' Monthly, M., 1904, vol. 9.

Pennsylvania.

- Lancaster, Journal of Philosophy, Psychology and Scientific Method, M., 1904, vol. 1.

Pennsylvania—Continued.

- Lancaster, Pennsylvania School Journal, M., 1904, vol. 53.
 Millersville, Normal Journal, Qu., 1904, vol. 18.
 Mount Airy, Philadelphia, Association Review, Bi-m., 1904, vol. 6.
 Philadelphia, American Church Sunday School Magazine, M., 1904, vol. 34.
 Philadelphia, Journal of Franklin Institute, M., 1904, vol. 158.
 Philadelphia, Stenographer (The), M., 1904, vol. 19.
 Philadelphia, Teacher (The), M., 1904, vol. 8.
 Williamsport, National Educator, M., 1904, vol. 45.

South Carolina.

- Aiken, Schofield School Bulletin, M., 1904, vol. 15.
 Columbia, Educational (The), M., 1904, vol. 3.

South Dakota.

- Mitchell, South Dakota Educator, M., 1904, vol. 18.

Tennessee.

- Chattanooga, Southern Educational Review, M., 1904, vol. 1.
 Nashville, Progressive Teacher (The), M., 1904, vol. 10.

Texas.

- Austin, Texas School Journal, M., 1904, vol. 22.
 Dallas, Texas School Magazine, M., 1904, vol. 7.

Virginia.

- Hampton, Southern Workman, M., 1904, vol. 33.
 Richmond, Virginia School Journal, M., 1904, vol. 13.
 Williamsburg, William and Mary College Quarterly, Qu., 1904, vol. 13.

Washington.

- Cheney, Normal Seminar, Qu., 1904, vol. 1.
 Seattle, Northwest Journal of Education, M., 1904, vol. 16.
 Vancouver, Washingtonian (The), Semi-m., 1904, vol. 13.

West Virginia.

- Charleston, West Virginia School Journal, M., 1904, vol. 33.

Wisconsin.

- Madison, Wisconsin Journal of Education, M., 1904, vol. 36.
 Milwaukee, American Journal of Education, M., 1904, vol. 38.
 Milwaukee, Catholic School Journal, M., 1904, vol. 5.
 Milwaukee, Lutherische Schulzeitung, M., 1904, vol. 30.
 Milwaukee, Mind and Body, M., 1904, vol. 11.
 Milwaukee, Pädagogische Monatshefte, M., 1904, vol. 6.
 Milwaukee, Western Teacher, M., 1904, vol. 13.

(2) ARRANGED BY SUBJECTS.

Common school education, elementary and secondary.

- American Education, from Kindergarten to College—N. Y.
 American Journal of Education—Wis.
 American Primary Teacher—Mass.
 Arkansas School Journal—Ark.
 Berea Quarterly—Ky.
 Catholic School Journal—Wis.
 Champlain Educator—N. Y.
 Colorado School Journal—Colo.
 Country School Champion—Kans.
 Education—Mass.
 Educational (The)—S. C.
 Educational Exchange—Ala.
 Educational Foundations—N. Y.
 Educational Review—N. Y.
 Educator (The)—Ala.
 Educator-Journal—Ind.
 Elementary School Teacher—Ill.
 Evangelisch-Lutherisches Schulblatt—Mo.
 Florida School Exponent—Fla.
 Intelligence—Ill.
 Iowa Teacher—Iowa.
 Journal of Education—Mass.
 Kansas Educator—Kans.
 Lutherische Schulzeitung—Wis.
 Mentor—N. Y.
 Midland Schools—Iowa.
 Minneapolis School Journal—Minn.
 Missouri School Journal—Mo.
 Moderator-Topics—Mich.
 National Educator—Pa.
 Nature Study Review—N. Y.

Common school education, elementary and secondary—Continued.

- Nebraska Teacher—Nebr.
 New Education—N. Y.
 Northwest Journal of Education—Wash.
 Ohio Educational Monthly—Ohio.
 Ohio Teacher—Ohio.
 Oregon Teachers' Monthly—Oreg.
 Pädagogische Monatshefte—Wis.
 Pennsylvania School Journal—Pa.
 People (The)—Mass.
 Popular Educator—Mass.
 Primary Education—Mass.
 Primary School—N. Y.
 Progressive Teacher—Tenn.
 Public School Journal—Ohio.
 Schofield School Bulletin—S. C.
 School—N. Y.
 School and Home Education—Ill.
 School Bulletin—N. Y.
 School Education—Minn.
 School Herald—Okla.
 School Journal—N. Y.
 School News and Practical Educator—Ill.
 School Work—N. Y.
 Seminary, Pedagogical—Mass.
 South Dakota Educator—S. Dak.
 Southern Educational Review—Tenn.
 Southern Letter—Ala.
 Southern School Journal—Ky.
 Teacher (The)—Pa.
 Teachers' Federation Bulletin—Ill.
 Teachers' Outlook—La.
 Texas School Journal—Tex.

Common school education, elementary and secondary—Continued.

Texas School Magazine—Tex.
 Virginia School Journal—Va.
 Washingtonian (The)—Wash.
 Webster County Teacher—Iowa.
 Western Journal of Education—Cal.
 Western School Journal—Kans.
 Western Teacher—Wis.
 West Virginia School Journal—W. Va.
 Wisconsin Journal of Education—Wis.

Kindergarten education.

Home Education—Ill.
 Kindergarten Magazine—Ill.
 Kindergarten Review—Mass.
 Little Folks—Mass.

Secondary education, exclusively or chiefly.

Educational Review—N. Y.
 Journal of Pedagogy—N. Y.
 Review of Catholic Pedagogy—Ill.
 School Review—Ill.
 School Science—Ill.

Normal school education.

Farmington Normal (The)—Me.
 Normal Instructor and Teachers' World—N. Y.
 Normal Journal—Pa.
 Normal Seminar—Wash.
 State Normal School Bulletin—Colo.
 Teachers' College Record—N. Y.
 Teachers' Institute—N. Y.

University publications.

Bostonia—Mass.
 Catholic University Bulletin—D. C.
 Columbia University Quarterly—N. Y.
 Johns Hopkins University Circular—Md.
 Pedagogical Seminary (The)—Mass.
 University Chronicle—Cal.
 University Courier—D. C.
 University Extension Quarterly—Ill.
 University Science Bulletin—Kans.
 University Record—Ill.
 Yale Review—Conn.
 William and Mary College Quarterly—Va.

Physical education.

American Physical Education Review—N. Y.
 Mind and Body—Wis.
 Posse Gymnasium Journal—Mass.

Religious and ethical education.

American Church Sunday School Magazine—Pa.
 Biblical World—Ill.
 Ethical Record—N. Y.
 Our Companion—Ohio.
 Sunday School Journal—N. Y.

Art education.

School Arts Book—Mass.

Child study and psychology.

American Journal of Psychology—Mass.
 American Journal of Religious Psychology and Education—Mass.

Child study and psychology—Continued.

Journal of Mental Pathology—N. Y.
 Journal of Philosophy, Psychology and Scientific Method—Pa.
 Psychological Bulletin—N. Y.
 Psychological Review—N. Y.

Industrial and technical education.

Craftsman (The)—N. Y.
 Industrialist (The)—Kans.
 Journal of Franklin Institute—Pa.
 Manual Training Magazine—Ill.
 Pratt Institute Monthly—N. Y.
 Southern Workman—Va.
 Technological Quarterly—Mass.

Deaf-mutes' education.

American Annals of the Deaf—D. C.
 Association Review—Pa.
 Deaf-Mutes' Journal—N. Y.
 Nebraska Mute Journal—Nebr.
 Ohio Chronicle for Deaf and Dumb—Ohio.
 Silent Worker—N. J.

Domestic education.

American Home Science Magazine—Mass.
 Boston Cooking School Magazine—Mass.

Language and elocution.

Correct English—Ill.
 Journal of Orthoepeia and Orthograft—N. J.
 Latin Leaflet—N. Y.
 Word Carrier—Nebr.

Calligraphy and stenography.

Penman's Art Journal—N. Y.
 Phonographic Magazine—Ohio.
 Pitman's Shorthand Weekly—N. Y.
 Pitman's Phonetic Journal—N. Y.
 Stenographer (The)—Pa.

Music.

New England Conservatory Magazine—Mass.
 School Music Monthly—Iowa.

Geography.

American Geographical Bulletin—N. Y.
 Journal of Geography—Ill.
 National Geographical Magazine—D. C.

Physiology and hygiene.

Good Health—Mich.
 School Physiology Journal—Mass.

School administration.

American School Board Journal—N. Y.
 Chicago Board of Education Bulletin—Ill.

Literature and criticism.

Chautauqua Assembly Herald—N. Y.
 Chautauquan (The)—Ohio.
 Dial (The)—Ill.
 Literary Digest—N. Y.
 Literary World—Mass.
 Notes and Queries—N. H.

Charitable education.

Charities—N. Y.
 Commons (The)—Ill.

CHAPTER XX.

EDUCATIONAL DIRECTORY.^a

I.—CHIEF STATE SCHOOL OFFICERS.

Name.	Address.	Official designation.
I. W. Hill.....	Montgomery, Ala.....	State superintendent of education.
N. G. Layton.....	Phoenix, Ariz.....	Territorial superintendent of public instruction.
John H. Hinemon.....	Little Rock, Ark.....	State superintendent of public instruction.
Thomas J. Kirk.....	Sacramento, Cal.....	Do.
Mrs. Helen L. Grenfell.....	Denver, Colo.....	Do.
Charles D. Hine.....	Hartford, Conn.....	Secretary of State board of education.
P. B. Norman, jr.....	Dover, Del.....	Do.
A. T. Stuart.....	Washington, D. C.....	Superintendent of District schools.
W. M. Holloway.....	Tallahassee, Fla.....	State superintendent of public instruction.
W. B. Merritt.....	Atlanta, Ga.....	State school commissioner.
Miss May L. Scott.....	Boise, Idaho.....	State superintendent of public instruction
Alfred Bayliss.....	Springfield, Ill.....	Do.
John D. Benedict.....	Muscogee, Ind. T.....	Territorial superintendent of schools.
F. A. Cotton.....	Indianapolis, Ind.....	State superintendent of public instruction.
John F. Riggs.....	Des Moines, Iowa.....	Do.
I. L. Dayhoff.....	Topeka, Kans.....	Do.
J. H. Fuqua, sr.....	Frankfort, Ky.....	Do.
J. B. Aswell.....	Baton Rouge, La.....	State superintendent of public education.
W. W. Stetson.....	Augusta, Me.....	State superintendent of public schools.
M. Bates Stephens.....	Annapolis, Md.....	State superintendent of public education.
George H. Martin.....	Boston, Mass.....	Secretary of State board of education.
Patrick H. Kelley.....	Lansing, Mich.....	State superintendent of public instruction.
J. W. Olsen.....	St. Paul, Minn.....	Do.
Henry L. Whitfield.....	Jackson, Miss.....	State superintendent of public education.
W. T. Carrington.....	Jefferson City, Mo.....	State superintendent of public schools.
W. W. Welch.....	Helena, Mont.....	State superintendent of public instruction.
J. L. McBrien.....	Lincoln, Nebr.....	Do.
Orvis Ring.....	Carson, Nev.....	Do.
A. C. Morrison.....	Concord, N. H.....	Do.
Chas. J. Baxter.....	Trenton, N. J.....	Do.
Hiram Hadley.....	Santa Fe, N. Mex.....	Territorial superintendent of public instruction.
Andrew S. Draper.....	Albany, N. Y.....	State commissioner of education.
J. Y. Joyner.....	Raleigh, N. C.....	State superintendent of public instruction.
W. L. Stockwell.....	Bismarck, N. Dak.....	Do.
E. A. Jones.....	Columbus, Ohio.....	State commissioner of common schools.
L. W. Baxter.....	Guthrie, Okla.....	Territorial superintendent of public instruction.
J. H. Ackerman.....	Salem, Oreg.....	State superintendent of public instruction.
Nathan C. Schaeffer.....	Harrisburg, Pa.....	Do.
Thomas B. Stockwell.....	Providence, R. I.....	Commissioner of public schools.
O. B. Martin.....	Columbia, S. C.....	State superintendent of education.
G. W. Nash.....	Pierre, S. Dak.....	State superintendent of public instruction.
Seymour A. Mynders.....	Nashville, Tenn.....	Do.
Arthur Lefevre.....	Austin, Tex.....	Do.
A. C. Nelson.....	Salt Lake City, Utah.....	Do.
Walter E. Ranger.....	Montpelier, Vt.....	State superintendent of education.
Joseph W. Southall.....	Richmond, Va.....	State superintendent of public instruction.
R. B. Bryan.....	Olympia, Wash.....	Do.
Thomas C. Miller.....	Charleston, W. Va.....	State superintendent of free schools.
C. P. Cary.....	Madison, Wis.....	State superintendent of public schools.
Thomas T. Tynan.....	Cheyenne, Wyo.....	State superintendent of public instruction.
Sheldon Jackson.....	Sitka, Alaska.....	General agent of education.
A. T. Atkinson.....	Honolulu, Hawaii.....	Superintendent of public instruction.
D. P. Barrows.....	Manila, Philippine Islands.....	General superintendent of public instruction.
Roland P. Falkner.....	San Juan, Porto Rico.....	Commissioner of education.

^a Corrected to May, 1905, in so far as changes have been reported to the Bureau.

II.—CITY SUPERINTENDENTS.

ALABAMA.

Anniston, D. R. Murphy.
 Bessemer, Joseph M. Dill.
 Birmingham, J. H. Phillips.
 Eufaula, F. L. McCoy.
 Florence, Arthur F. Harman.
 Gadsden, W. E. Striplin.
 Girard, W. F. Monk.
 Huntsville, S. R. Butler.
 Mobile, S. S. Murphy.
 Montgomery, Charles L. Floyd.
 New Decatur, ———.
 Opelika, George W. Brock.
 Phoenix, J. H. Davis.
 Selma, R. E. Hardaway.
 Talladega, John D. McNeel.
 Troy, John P. Selman.
 Tuscaloosa, James H. Foster.

ARIZONA.

Phoenix, J. Cole.
 Tucson, Francis M. Walker (supervising principal).

ARKANSAS.

Fayetteville, J. C. Mitchell.
 Fort Smith, B. W. Torreyson.
 Helena, S. H. Spragins.
 Hot Springs, George B. Cook.
 Jonesboro, D. T. Rogers.
 Little Rock, J. R. Rightsell.
 Pine Bluff, Junius Jordan.
 Texarkana, W. C. McAlister.

CALIFORNIA.

Alameda, Fred T. Moore.
 Bakersfield, David W. Nelson.
 Berkeley, S. D. Waterman.
 Eureka, A. C. Barker.
 Fresno, C. L. McLane.
 Grass Valley, J. S. Hennessy.
 Los Angeles, James A. Foshay.
 Napa City, J. L. Shearer (principal grammar school).
 Oakland, John W. McClymonds.
 Pasadena, James D. Graham.
 Pomona, P. W. Kauffman.
 Redlands:
 School district, A. Harvey Collins (supervising principal).
 Lugonia district, D. C. Reed (supervising principal).
 Riverside, A. N. Wheelock.
 Sacramento, O. W. Erlewine.
 San Bernardino, F. W. Conrad.
 San Diego, Willard S. Small.
 San Francisco, W. H. Langdon.
 San Jose, George S. Wells.
 Santa Ana, Joseph C. Templeton.
 Santa Barbara, H. A. Adrian.
 Santa Cruz, David C. Clark (principal).
 Santa Rosa, E. M. Cox (principal).
 Stockton, James A. Barr.
 Vallejo, John Davidson.

COLORADO.

Aspen, F. J. Browncombe.
 Boulder, William V. Casey.
 Canyon City, J. H. Allen.
 Colorado Springs, John Deitrich.
 Cripple Creek, Wilson M. Shafer.
 Denver, Lewis C. Greenlee.
 Leadville, Frederick P. Austin.
 Pueblo:
 District No. 1, James S. McClung.
 District No. 20, John F. Keating.
 Trinidad, J. P. Treat.
 Victor, W. M. Shafer.

CONNECTICUT.

Ansonia, Edwin C. Andrews.
 Branford, H. S. Lovejoy.
 Bridgeport, Charles W. Deane.
 Bristol, Charles L. Wooding.
 Danbury, Gilman C. Fisher (secretary board of school visitors).
 Derby, J. W. Peck.
 East Hartford, George Dickson.
 Enfield, George T. Finch (acting visitor).
 Glastonbury, Chas. G. Rankin.
 Greenwich, Newton B. Hobart (principal), Thomas F. Howley (sec. bo. sch. visitors).
 Hamden, Charles F. Clarke (secretary school committee).
 Hartford, Thomas S. Weaver.
 Huntington, W. D. Hood.
 Killingly, James M. Paine.
 Manchester:
 Town schools, Herbert O. Bowers (secretary board of school visitors).
 Ninth district (south), Fred A. Verplanck.
 Meriden, Albert B. Mather.
 Middletown, Walter B. Ferguson.
 Naugatuck, Frank W. Eaton.
 New Britain, Giles A. Stuart.
 New Haven, Frank Herbert Beece.
 New London, Charles B. Jennings.
 New Milford, John Pettibone.
 Norwalk, Arthur C. Wheeler (secretary board of school visitors).
 Norwich:
 Nathan Lee Bishop (superintendent Central district).
 John B. Stanton (superintendent West Chelsea district).
 Putnam:
 W. R. Barber (secretary board of school visitors).
 E. H. Johnson (acting school visitor).
 Southington, Mrs. Anna D. Pollard.
 South Norwalk, A. Blanchard (secretary board of school visitors).
 Stafford, Alvaredo Howard (chairman).
 Stamford, Everett C. Willard.
 Stonington, James H. Weeks, jr. (secretary board of school visitors).
 Torrington, Edwin H. Forbes.
 Vernon, W. B. Foster.
 East district, Isaac M. Agard.

CONNECTICUT—Continued.

Wallingford, W. O. Cartwright, J. E. Wildman
(secretary board of school visitors).
Waterbury, B. W. Tinker.
West Haven, Edgar C. Stiles.
Westport, George H. Tracy.
Windham, Curtis Dean (chairman).
Winsted, Wm. H. Millington.

DELAWARE.

Wilmington, George W. Twitmyer.

DISTRICT OF COLUMBIA.

Washington, A. T. Stuart.

FLORIDA.

Jacksonville, Frank Elzey.
Key West, J. V. Harris (county superintendent).
Lake City, T. H. Owens (county superintendent).
Pensacola, N. B. Cook (county superintendent).
St. Augustine, R. B. Ruthersford.
Tampa, B. C. Graham (county superintendent).

GEORGIA.

Albany, L. E. Welsh (principal).
Americus, A. G. Miller.
Athens, G. G. Bond.
Atlanta, W. F. Slaton.
Augusta, Lawton B. Evans.
Brunswick, N. H. Ballard.
Columbus, Carleton B. Gibson.
Dalton, B. M. Thomas.
Elberton, J. C. Langston.
Gainesville, J. D. Garner.
Griffin, J. Henry Walker.
Lagrange, C. L. Smith.
Macon, C. B. Chapman.
Marietta, W. T. Dumas.
Milledgeville, W. E. Reynolds.
Rome, James C. Harris.
Savannah, Otis Ashmore.
Thomasville, Allen J. Barwick.
Valdosta, R. B. Daniel.
Waycross, E. A. Pound.

IDAHO.

Boise, J. E. Williamson.
Pocatello, Walter R. Siders.

ILLINOIS.

Aiton, Robert A. Haight.
Aurora:
District No. 4 (west side), A. V. Greenman.
District No. 5 (east side), C. M. Bardwell.
Beardstown, J. Gladden Hutton.
Belleville, George H. Busieck.
Belvidere, Arthur J. Snyder.
Bloomington, J. K. Stableton.
Blue Island, J. E. Lemon.
Cairo, Taylor C. Clendenen.
Canton, G. W. L. Meeker.
Centralia, S. H. Bohn.
Champaign, Joseph Carter.
Charleston, De Witt Elwood.
Chicago, Edwin G. Cooley.
Chicago Heights, F. M. Richardson.
Clinton, Frank L. Horn.
Collinsville, Samuel J. Curlee.

ILLINOIS—Continued.

Danville, L. H. Griffith.
Deeatur, Enoch A. Gastman.
Dekalb, Newell D. Gilbert.
Dixon, L. B. Neighbour.
North Dixon, H. V. Baldwin.
Duquoin, Charles W. Houk.
East St. Louis, John E. Miller.
Edwardsville, T. M. Birney.
Elgin, M. A. Whitney.
Evanston:
District No. 75, Homer H. Kingsley.
District No. 74, North Evanston, Nellie E. Trembor (principal).
District No. 76, South Evanston, Fred W. Nichols.
Freeport, S. E. Raines.
Galena, P. H. Clark.
Galesburg, William L. Steele.
Harlem, Frank Curtis.
Harvey, F. L. Miller.
Hoopston, S. A. D. Harry.
Jacksonville, E. E. Webster.
Jercyville, J. Pike.
Joliet, John J. Allison.
Kankakee, F. N. Tracy.
Kewanee, A. C. Butler.
Lagrange, F. E. Sanford.
La Salle, J. B. McManus.
Lincoln, ———.
Litchfield, C. E. Richmond.
Macomb, W. W. Earnest.
Maywood, J. Porter Adams.
Mattoon, G. P. Randle.
Metropolis City, T. F. McCartney.
Moline, Gerard T. Smith.
Monmouth, B. F. Armitage.
Morris, Preston King Cross.
Mount Carmel, W. S. Booth.
Mount Vernon, E. E. Van Cleve.
Murphysboro, Edward J. Klemme.
Olney, G. D. Wham.
Ottawa, W. A. Furr.
Pana, Wm. Miner.
Paris, H. W. Monleal.
Pekin, James J. Crosby.
Peoria, Newton Charles Dougherty.
Pern, Ira M. Ong.
Pontiac, Isaac Mitchell.
Princeton, M. G. Clark.
Quincy, D. B. Rawlins.
Rockford, P. R. Walker.
Rock Island, Herbert B. Hayden.
Springfield, J. H. Collins.
Spring Valley, V. R. McKnight.
Sterling:
District No. 3 (the Sterling schools), H. L. Chaplin.
District No. 10 (the Wallace schools), Miss A. Laurie Hill.
Streator, John Andrew Long.
Taylorville:
East side, Henry Fowkes.
West side, H. N. Foltz.
Urbana, J. W. Hays.
Waukegan, M. A. Besley.

INDIANA.

Alexandria, J. G. Collicott.
 Anderson, John W. Carr.
 Bedford, W. E. Alexander.
 Bloomington, James K. Beck.
 Bluffton, W. A. Wirt.
 Brazil, L. B. O'Dell.
 Columbus, T. F. Fitzgibbon.
 Connersville, W. S. Rowe.
 Crawfordsville, William A. Mills.
 Decatur, H. A. Hartman.
 Elkhart, D. W. Thomas.
 Evansville, Frank W. Cooley.
 Fort Wayne, Justin N. Study.
 Frankfort, Edwin S. Monroe.
 Franklin, H. B. Wilson.
 Goshen, Victor W. B. Hedgepeth.
 Greenfield, W. C. Goble.
 Greensburg, Elmer C. Jerman.
 Hammond, W. H. Hershman.
 Hartford City, C. H. Drybread.
 Huntington, W. P. Hart.
 Indianapolis, Calvin N. Kendall.
 Jeffersonville, C. M. Marble.
 Kokomo, Robert A. Ogg.
 Lafayette, R. F. Hight.
 Laporte, John A. Wood.
 Lawrenceburg, Jesse W. Riddle.
 Lebanon, Charles A. Peterson.
 Logansport, Albert H. Douglass.
 Madison, C. M. McDaniel.
 Marion, Benjamin F. Moore.
 Martinsville, J. E. Robinson.
 Michigan City, Paul A. Cowgill.
 Mishawaka, J. F. Nuner.
 Mount Vernon, Edward G. Bauman
 Muncie, George L. Roberts.
 New Albany, C. A. Prosser.
 Noblesville, John A. Carnagey.
 Peru, A. A. Campbell.
 Portland, Hale Bratt.
 Princeton, Harold Barnes.
 Richmond, Thomas A. Mott.
 Rushville, J. H. Scholl.
 Seymour, H. C. Montgomery.
 Shelbyville, James H. Tomlin.
 South Bend, Calvin Moon.
 Terre Haute, William H. Wiley.
 Tipton, I. L. Conner.
 Valparaiso, Arthur A. Hughart.
 Vincennes, Albert E. Humke.
 Wabash, Adelaide S. Baylor.
 Warsaw, Noble Harter.
 Washington, William F. Axtell.
 Whiting, John C. Hall.

INDIAN TERRITORY.

Ardmore, W. H. Buck.
 Muskogee, Miss S. B. Trent.

IOWA.

Atlantic, Carlos M. Cole.
 Boone, J. C. King.
 Burlington, Francis M. Fultz.
 Cedar Falls, D. M. Kelly.
 Cedar Rapids, J. J. McConnell.
 Centerville, F. E. King.

IOWA—Continued.

Chariton, J. B. Morris.
 Charles City, C. A. Kent.
 Cherokee, A. V. Storm.
 Clinton, O. P. Bostwick.
 Council Bluffs, W. N. Clifford.
 Creston, O. E. French.
 Davenport, J. B. Young.
 Des Moines:
 East Side, R. J. Hartung.
 West Side, Samuel H. Sheakley.
 Capital Park, W. A. Brandenburg.
 Dubuque, F. T. Oldt.
 Fairfield, S. A. Power.
 Fort Dodge, George H. Mullin.
 Fort Madison, C. W. Cruikshank.
 Grinnell, D. A. Thornburg.
 Iowa City, S. K. Stevenson.
 Keokuk, William Aldrich.
 Lemars, Thomas B. Hutton.
 Marion, G. E. Finch.
 Marshalltown, William I. Crane.
 Mason City, E. L. Coffeen.
 Missouri Valley, J. H. Beveridge.
 Mount Pleasant, Frank Whittier Else.
 Muscatine, W. F. Chevalier.
 Newton, E. J. H. Beard.
 Oelwein, L. B. Moffett.
 Oskaloosa, S. J. Finley.
 Ottumwa, A. W. Stuart.
 Perry, W. B. Thornburgh.
 Redoak, George S. Dick.
 Sioux City, W. M. Stevens.
 Washington, R. B. Crone.
 Waterloo:
 East Side, F. H. Bloodgood.
 West Side, A. T. Hukill.
 Webster City, L. H. Ford.

KANSAS.

Argentine, H. P. Butcher.
 Arkansas City, W. M. Fisher.
 Atchison, Nathan T. Veatch.
 Chanute, W. E. Royster.
 Coffeyville, William M. Sinclair.
 Emporia, L. A. Lowther.
 Fort Scott, David M. Bowen.
 Galena, J. A. Higdon.
 Hutchinson, R. R. Price.
 Independence, C. S. Risdon.
 Iola, Miss Clifford A. Mitchell.
 Junction City, William S. Heusner.
 Kansas City, M. E. Pearson.
 Lawrence, Frank P. Smith.
 Leavenworth, George W. Kendrick.
 Newton, David F. Shirk.
 Osawatomie, R. Rankin.
 Ottawa, A. L. Bell.
 Parsons, J. A. Higdon.
 Pittsburg, A. H. Bushey.
 Salina, George R. Crissman.
 Topeka, L. D. Whittemore.
 Wellington, W. M. Massey.
 Wichita, R. F. Knight.
 Winfield, J. W. Spindler.

KENTUCKY

Ashtland, John Grant Crabbe.
 Bellevue, John Maddox.
 Bowling Green, Edward Taylor.
 Covington, Charles M. Merry.
 Danville, W. C. Grinstead (principal of high school).
 Dayton, G. W. Gurney.
 Frankfort, H. C. McKee.
 Georgetown, R. L. Garrison.
 Henderson, Livingstone McCartney.
 Hopkinsville, J. B. Taylor.
 Lexington, M. A. Cassidy.
 Louisville, Edgar H. Mark.
 Maysville, E. Regenstein (principal of high school).
 Middlesboro, M. O. Winfrey.
 Newport, John Burke.
 Owensboro, McHenry Rhoads.
 Paducah, C. M. Lieb.
 Paris, J. A. Sharon.
 Richmond, H. H. Brock.
 Winchester, R. M. Shift.

LOUISIANA.

Alexandria, L. L. Hooe.
 Baton Rouge, R. C. Gordon.
 Crowley, E. B. Stover.
 Donaldsonville, Richard McCulloch.
 Lake Charles, L. L. Squires.
 Monroe, George W. Reid.
 New Iberia, J. C. Ellis.
 New Orleans, Warren Easton.
 Shreveport, C. E. Byrd.

MAINE.

Auburn, Payson Smith.
 Augusta:
 Mrs. A. H. D. Hanks (superintendent sub-urban and high schools).
 Weston Lewis (principal Williams district).
 Bangor, Charles E. Tilton.
 Bath, Frederick W. Freeman.
 Belfast, John R. Dunton.
 Biddeford, Royal E. Gould.
 Brewer, Mrs. Mertie M. Curtis.
 Brunswick, Frank E. Woodruff.
 Calais, P. D. Brown.
 Eastport, Parker T. Pearson (district superintendent).
 Ellsworth, R. E. Mason.
 Gardiner, Charles O. Turner.
 Houlton, H. L. Putnam.
 Lewiston, I. C. Phillips.
 Oldtown, D. L. Wormwood.
 Portland, Orlando M. Lord.
 Rockland, H. H. Randall.
 Saco, John S. Locke.
 Sanford, M. E. Bennett.
 Skowhegan, D. W. Colby.
 South Portland, L. M. Sandborn.
 Waterville, Elwood T. Wyman.
 Westbrook, Fred. Benson.

MARYLAND.

Annapolis, H. R. Wallis (principal).
 Baltimore, J. H. Van Sickle.
 Cambridge, J. T. White.
 Cumberland, John T. White (county school examiner).
 Frederick, Ephraim L. Boblitz (county school examiner).
 Frostburg, Olin R. Rice (principal).
 Hagerstown, John P. Fockler (county school examiner).
 Salisbury, H. C. Bounds.

MASSACHUSETTS.

Abington, W. H. Sanderson.
 Adams, Francis A. Bagnall.
 Amesbury, C. S. Lyman.
 Amherst, Audubon L. Hardy.
 Andover, Corwin F. Palmer.
 Arlington, Frank S. Sutcliffe.
 Athol, W. Scott Ward.
 Attleboro, William P. Kelly.
 Barnstable, F. W. Kingman.
 Belmont, George P. Armstrong.
 Beverly, Adelbert Leon Safford.
 Blackstone, J. B. Davis.
 Boston, George H. Conley.
 Braintree, J. A. MacDougall.
 Bridgewater, W. H. Sanderson.
 Brockton, B. B. Russell.
 Brookline, George I. Aldrich.
 Cambridge, Francis Cogswell.
 Canton, James S. Perkins.
 Chelsea, B. C. Gregory.
 Chicopee, John C. Gray.
 Clinton, Charles L. Hunt.
 Concord, William L. Eaton.
 Danvers, Arthur J. Collins.
 Dartmouth, Charles E. Soule (secretary of school committee).
 Dedham, Roderick Whittlesey Hine.
 Easthampton, W. D. Miller.
 Easton, Osman C. Evans.
 Everett, U. G. Wheeler.
 Fall River, William C. Bates.
 Fitchburg, Joseph G. Edgerly.
 Framingham, Samuel F. Blodgett.
 Franklin, Irving H. Gamwell.
 Gardner, Judson I. Wood.
 Gloucester, Freeman Putney.
 Grafton, Robert O. Small.
 Great Barrington, H. Dressel, jr.
 Greenfield, G. H. Danforth.
 Haverhill, Stanley H. Holmes.
 Hingham, Nelson G. Howard.
 Holyoke, Louis P. Nash.
 Hudson, James G. Morrell.
 Hyde Park, Frank O. Draper.
 Ipswich, Andrew S. Thomson.
 Lawrence, John E. Burke.
 Leominster, Thomas E. Thompson.
 Lexington, Henry W. Porter.
 Lowell, Arthur K. Whitcomb.

MASSACHUSETTS—Continued.

Lynn, Frank J. Peaslee.
 Malden, Henry D. Hervey.
 Manchester, George P. Armstrong.
 Mansfield, Edward P. Fitts.
 Marblehead, John B. Gifford.
 Marlboro, J. Asbury Pitman.
 Medford, Charles H. Morss.
 Melrose, Fred H. Niekerson.
 Merrimae, George E. Chickering.
 Methuen, Charles A. Breck.
 Middleboro, Charles H. Bates.
 Milford, Charles W. Haley.
 Millbury, Watson C. Lea (post-office, Oxford).
 Milton, Asher J. Jacoby (post-office, East Milton).
 Montague, Frank P. Davison (post-office, Turners Falls).
 Natick, Albert L. Barbour.
 Needham, Henry M. Walratt.
 New Bedford, William E. Hatch.
 Newburyport, William P. Lunt.
 Newton, Frank E. Spaulding.
 North Adams, Isaac Freeman Hall.
 Northampton, Sehuyler F. Herron.
 North Andover, George E. Chickering.
 North Attleboro, James W. Brehant.
 Northbridge, S. A. Meleher.
 North Brookfield, Wm. A. Hoyt.
 Norwood, Robert J. Fuller.
 Orange, Edward Dixon.
 Palmer, Harold M. Dean.
 Peabody, Albert Robinson.
 Pittsfield, Eugene Bouton.
 Plymouth, Francis J. Heavens.
 Provincetown, Alvan R. Lewis.
 Quincy, Frank Edson Parlin.
 Randolph, John E. Bradley.
 Reading, Melville A. Stone.
 Revere, Wm. H. Winslow.
 Rockland, James H. Tangney.
 Rockport, H. L. Woodward.
 Salem, John Wright Perkins.
 Saugus, Charles E. Stevens.
 Somerville, Gordon A. Southworth.
 Southbridge, Fred E. Corbin.
 South Hadley, Frederick E. Whittemore.
 Spenceer, Charles F. Adams.
 Springfield, Thomas M. Balliet.
 Stoneham, Charles E. Stevens.
 Stoughton, Edward P. Fitts.
 Swampscott, Harold C. Childs.
 Taunton, C. F. Boyden.
 Upton, R. O. Small.
 Wakefield, Alfred C. Thompson.
 Waltham, William D. Parkinson.
 Ware, George W. Cox.
 Warren, O. H. Adams.
 Watertown, Frank R. Page.
 Webster, E. W. Robinson.
 Wellesley, Marshall Livingston Perrin.
 Westboro, H. C. Waldron.
 Westfield, Charles L. Simmons.
 West Springfield, C. E. Broekway.
 Weymouth, Elmer E. Sherman.
 Whitman, Henry M. Walratt.
 Williamstown, Walter G. Mithell.
 Winchendon, David B. Loeke.

MASSACHUSETTS—Continued.

Winchester, Robert C. Metcalf.
 Winthrop, Frank A. Douglas.
 Woburn, George I. Clapp.
 Worcester, Homer P. Lewis.

MICHIGAN.

Adrian, Charles W. Mickens.
 Albion, W. J. McKone.
 Alpena, George A. Hunt.
 Ann Arbor, H. M. Slauson.
 Battle Creek, William G. Coburn.
 Bay City, John A. Stewart.
 Benton Harbor, Eugene A. Wilson.
 Bessemer, Miss A. F. Oleott.
 Big Rapids, James R. Miller.
 Cadillac, James Hamilton Kaye.
 Calumet, H. E. Kratz.
 Charlotte, M. R. Parmelee.
 Cheboygan, William C. Thompson.
 Coldwater, M. Victor Staley.
 Delray, Frank Cody.
 Detroit, Wales C. Martindale.
 Dowagiac, Warren E. Conkling.
 Escanaba, William M. Jolliffe.
 Flint, A. N. Cody.
 Gladstone, J. H. McDonald.
 Grand Haven, Edward P. Cummings.
 Grand Rapids, W. H. Elson.
 Hanceok, Eugene La Rowe.
 Hillsdale, S. J. Gier.
 Holland, J. E. Clark.
 Ionia, C. L. Bemis.
 Iron Mountain, L. E. Amidon.
 Ironwood, L. L. Wright.
 Ishpeming, E. E. Seribner.
 Jackson, L. S. Norton.
 Kalamazoo, S. O. Hartwell.
 Lansing, W. D. Sterling.
 Ludington, Guy D. Smith.
 Manistee, Samuel W. Baker.
 Manistique, W. E. Hanson.
 Marine City, H. A. Markham.
 Marquette, E. C. Thompson.
 Marshall, Ralph S. Garwood.
 Menominee, B. S. Hopkins.
 Monroe, R. D. Briggs.
 Mount Clemens, J. B. Estabrook.
 Muskegon, Joseph M. Frost.
 Negaunee, Orr Schurtz.
 Niles, J. D. Schiller.
 Norway, E. P. Frost.
 Owosso, J. W. Simmons.
 Petoskey, W. M. Andrus.
 Pontiac, James H. Harris.
 Port Huron, W. F. Lewis.
 Saginaw:
 East Side, E. C. Warriner.
 West Side, Phil. Huber.
 St. Joseph, Ernest P. Clarke.
 Sault Ste. Marie, E. E. Ferguson.
 South Haven, A. D. Prentice.
 Traverse City, I. B. Gilbert.
 West Bay City, E. D. Palmer.
 Wyandotte, F. H. Sooy.
 Ypsilanti, Wm. B. Arbaugh.

MINNESOTA.

Albert Lea, E. M. Phillips.
 Austin, Andrew Nelson.
 Brainerd, T. B. Hartley.
 Crookston, E. E. McIntire.
 Duluth, Robert E. Denfeld.
 Faribault, George A. Franklin.
 Fergus Falls, J. A. Vandyke.
 Hastings, C. W. Meyer.
 Little Falls, H. E. White.
 Mankato, James M. McConnell.
 Minneapolis, Charles M. Jordan.
 Moorhead, C. W. Mickens.
 New Ulm, E. T. Critchett.
 Owatonna, P. J. Kuntz.
 Red Wing, W. F. Kunze.
 Rochester, Lester S. Overholt.
 St. Cloud, J. A. Cranston.
 St. Paul, A. J. Smith.
 St. Peter, V. R. Wasson.
 Stillwater, Darius Steward.
 Winona, Charles R. Frazier.

MISSISSIPPI.

Biloxi, J. H. Owings.
 Columbus, Joe Cook.
 Greenville, E. E. Bass.
 Hattiesburg, F. B. Woodley.
 Jackson, Edward L. Bailey.
 McComb, Henry P. Hughes.
 Meridian, J. C. Fant.
 Natchez, J. Reese Lin (principal); J. W. Henderson (county superintendent); G. W. Brumfield (clerk of school board).
 Vicksburg, Charles Pendleton Kemper.
 Water Valley, W. W. Phelan.
 Yazoo City, Robert Torrey.

MISSOURI.

Aurora, N. N. Hoover.
 Boonville, M. A. O'Rear.
 Brookfield, J. U. White.
 Cape Girardeau, Fred. L. MacChesney.
 Cartersville, O. N. Waltz.
 Carthage, J. M. White.
 Chillicothe, G. A. Smith.
 Clinton, Arthur Lee.
 Columbia, R. H. Emberson.
 Desoto, Jasper N. Tankersley.
 Fulton, J. C. Humphreys.
 Hannibal, R. B. D. Simonson.
 Independence, William L. C. Palmer.
 Jefferson City, J. W. Richardson.
 Joplin, W. P. Roberts.
 Kansas City, James M. Greenwood.
 Kirksville, E. E. Funk.
 Lexington, C. A. Phillips.
 Louisiana, Miss Elizabeth Whitaker.
 Macon, William A. Annin.
 Marshall, J. M. Taylor.
 Maryville, C. A. Hawkins.
 Mexico, D. A. McMillan.
 Moberly, J. A. Whiteford.
 Nevada, E. S. Clarke.
 Poplar Bluff, J. N. Street.
 Richhill, L. F. Robinson.
 St. Charles, Joseph Herring.

MISSOURI—Continued.

St. Joseph, J. A. Whiteford.
 St. Louis, F. Louis Soldan.
 Sedalia, G. V. Buchanan.
 Springfield, Jonathan Fairbanks.
 Trenton, T. B. Ford.
 Warrensburg, W. E. Morrow.
 Webb City, A. G. Young.

MONTANA.

Anaconda, F. A. Swanger.
 Butte, R. G. Young.
 Great Falls, S. D. Largent.
 Helena, Randall J. Condon.
 Missoula, J. G. McKay.

NEBRASKA.

Beatrice, C. A. Fulmer.
 Fremont, J. L. Laird.
 Grand Island, Robert J. Barr.
 Hastings, J. D. French.
 Kearney, A. O. Thomas.
 Lincoln, W. L. Stephens.
 Nebraska City, N. Sinclair.
 Norfolk, D. C. O'Connor.
 Omaha, W. M. Davidson.
 Plattsmouth, E. L. Rouse.
 South Omaha, J. Arnott McLean.
 York, W. W. Stoner.

NEVADA.

Reno, W. H. A. Pike.

NEW HAMPSHIRE.

Berlin, G. H. Whitcher.
 Claremont, Charles Tracy.
 Concord (Union district), Louis J. Rundlett;
 (Penacook district No. 20), H. C. Sanborn.
 Dover, A. H. Keyes.
 Exeter, John A. Brown (chairman school board).
 Franklin, H. C. Sanborn.
 Keene (Union district), Thaddeus William Harris.
 Laconia, J. H. Blaisdell.
 Littleton, M. C. Smart.
 Manchester, Charles W. Bickford.
 Nashua, James H. Fasset.
 Portsmouth, H. C. Morrison.
 Rochester, Ernest L. Silver.
 Somersworth, C. C. Ferguson.

NEW JERSEY.

Asbury Park, Fred S. Shepherd.
 Atlantic City, Charles B. Boyer.
 Bayonne, James H. Christie.
 Bloomfield, William E. Chancellor.
 Boonton, M. P. Reagle (principal).
 Bordentown, William Macfarland.
 Bridgeton, E. J. Hitchner.
 Burlington, Wilbur Watts (principal).
 Camden, James E. Bryan.
 Dover, J. Howard Hulsart (supervising principal).
 East Orange, Vernon L. Davey.
 Elizabeth, William J. Shearer.
 Englewood, Elmer C. Sherman.
 Gloucester, Horatio Draper.
 Hackensack, Isaac A. Demarest.

NEW JERSEY—Continued.

Harrison, James F. Prendergast.
 Hoboken, A. J. Demarcst.
 Irvington, F. H. Morrell.
 Jersey City, Henry Snyder.
 Kearney, Don C. Bliss (post-office, Arlington).
 Lambertville, Alex. P. Kerr (supervising principal).
 Long Branch, Christopher Gregory.
 Madison, A. F. Stauffer.
 Millville, Silas C. Smith.
 Montclair, Randall Spaulding.
 Morristown, W. L. R. Haven.
 Newark, Addison B. Poland.
 New Brunswick, William Clinton Armstrong.
 Newton, Charles J. Majory (supervising principal).
 North Plainfield, H. J. Wightman.
 Orange, William M. Swingle.
 Passaic, F. E. Spaulding.
 Paterson, Wm. E. Chancellor.
 Perth Amboy, S. E. Shull.
 Phillipsburg, H. Budd Howell.
 Plainfield, Henry M. Maxson.
 Princeton, J. M. Arnold.
 Rahway, E. C. Broome.
 Redbank, S. V. Arrowsmith.
 Rutherford, Stephen B. Gilhuly.
 Salem, Morris H. Stratton.
 Somerville, H. C. Krebs (supervising principal).
 South Amboy, S. M. Fitch (supervising principal).
 South Orange, H. W. Foster.
 Summit, John K. Lathrop.
 Town of Union, Otto Ortel (post-office, Weehawken).
 Trenton, Ebenezer Mackey.
 Union, Ambrose B. Kline.
 Vineland, J. J. Unger.
 West Hoboken, Robert Waters.
 West New York, Wm. M. Van Sickle.
 West Orange, A. H. Sherman.
 Woodbury, J. E. Frey (supervising principal).

NEW MEXICO.

Albuquerque, A. B. Stroup.
 Raton, Wm. M. Heiney.
 Santa Fe, J. A. Wood.

NEW YORK.

Albany, Charles W. Cole.
 Albion, Willis G. Carmer.
 Amsterdam, Harrison T. Morrow.
 Auburn, Clinton S. Marsh.
 Ballston Spa, A. A. Lavery (supervising principal).
 Batavia, John Kennedy.
 Bath, W. T. Palmer.
 Binghamton, G. R. Miller.
 Buffalo, Henry P. Emerson.
 Canandaigua, J. Carlton Norris.
 Catskill, Philo H. Edick.
 Cohoes, Edward Hayward.
 Corning:
 District No. 9, Leigh R. Hunt.
 District No. 13, A. M. Blodgett (principal).
 Cortland, Ferdinand E. Smith.

NEW YORK—Continued.

Dunkirk, James C. Van Etten.
 Elmira, C. F. Walker.
 Fredonia, Mary F. Lord (principal).
 Fulton, J. R. Fairgrieve.
 Geneva, William H. Truesdale.
 Glens Falls, E. W. Griffith.
 Gloversville, James A. Estee.
 Green Island, James Heatly.
 Haverstraw, L. O. Markham.
 Herkimer, ————.
 Hoosick Falls, H. H. Snell.
 Hornellsville, Elmer S. Redman.
 Hudson, ————.
 Ilion, Alfred W. Abrams.
 Ithaca, F. D. Boynton.
 Jamestown, Rovillus R. Rogers.
 Johnstown, Frank W. Jennings.
 Kingston, S. R. Shear.
 Lancaster, W. J. Barr (principal).
 Lansingburg, George F. Sawyer.
 Little Falls, A. J. Merrell.
 Lockport, Emmet Belknap.
 Lyons, W. H. Kinney.
 Malone, Miss Sarah L. Perry.
 Mamaroneck, George McAndrew (supervising principal).
 Matteawan, Earlman Fenner (principal).
 Mechanicsville, L. B. Blakeman.
 Medina, T. H. Armstrong.
 Middletown, James F. Tuthill.
 Mount Vernon, Charles E. Nichols.
 Newark, Charles A. Hamilton (principal).
 Newburg, James M. Crane.
 New Rochelle, Isaac E. Young.
 New York, William H. Maxwell.
 Niagara Falls, R. A. Taylor.
 North Tarrytown, L. W. Craig (principal).
 North Tonawanda, R. A. Searing.
 Norwich, Stanford J. Gibson.
 Nyack, Ira H. Lawton.
 Ogdensburg, H. H. Southwick.
 Olean, Delmer E. Bachelier.
 Oneida, Avery Warner Skinner.
 Oneonta, William C. Franklin.
 Ossining, W. H. Ryan.
 Oswego, George E. Bullis.
 Owego, Elmer G. Bridgman.
 Peekskill:
 District No. 7 (Drumhill), Wilbur L. Ellis.
 District No. 8 (Oakside), A. D. Dunbar.
 Penn Yan, Jay Crissey.
 Plattsburg, S. J. Preston.
 Port Chester, E. G. Lantman.
 Port Jervis, John M. Dolph.
 Poughkeepsie, Wm. Alexander Smith.
 Rensselaer, A. R. Coulson.
 Rochester, Clarence F. Carroll.
 Rome, Lewis N. Crane.
 Salamanca, Thomas Stone Bell.
 Sandy Hill, Frances A. Tefft (principal).
 Saratoga Springs, Thomas R. Kneil.
 Schenectady, Samuel B. Howe.
 Seneca Falls, C. Willard Rice.
 Syracuse, A. B. Blodgett.
 Tarrytown, J. V. Sturges (principal).
 Tonawanda, Frank K. Sutley.

NEW YORK—Continued

Troy, John H. Willets.
 Utica, Martin G. Benedict.
 Waterloo, H. B. Smith (supervising principal)
 Watertown, Frank S. Tisdale.
 Watervliet, Russell H. Bellows.
 Waverly, E. B. Robbins.
 Whitehall, Wilber W. Howe.
 White Plains, W. A. McConnell.
 Yonkers, Charles E. Gorton.

NORTH CAROLINA.

Asheville, R. J. Tighe.
 Charlotte, R. B. Hunter.
 Concord, Walter Thompson.
 Durham, J. A. Matheson.
 Elizabeth City, W. M. Hinton.
 Fayetteville, B. T. McBryde.
 Gastonia, Joe S. Wray.
 Goldsboro, Eugene C. Brooks.
 Greensboro, Edgar D. Broadhurst.
 Henderson, J. T. Alderman.
 High Point, George H. Crowell.
 Kingston, L. C. Brogden.
 Newbern, H. B. Craven.
 Raleigh, Edward P. Moses.
 Salisbury, I. C. Griffin.
 Washington, Harry Howell.
 Wilmington, ———.
 Winston, W. S. Snipes.

NORTH DAKOTA.

Fargo, Alfred E. Logie.
 Grand Forks, J. Nelson Kelley.

OHIO.

Akron, Henry V. Hotchkiss.
 Alliance, John E. Morris. •
 Ashland, E. P. Dean.
 Ashtabula, R. P. Clark.
 Barberton, W. M. Glasgow.
 Bellaire, J. R. Anderson.
 Bellefontaine, John W. Mackinnon.
 Bellevue, E. F. Warner.
 Bowling Green, N. D. O. Wilson.
 Bridgeport, S. A. Gillett.
 Bucyrus, J. J. Bliss.
 Cambridge, C. L. Cronebaugh.
 Canal Dover, Franklin P. Geiger.
 Canton, J. M. Sarver.
 Chillicothe, M. E. Hard.
 Cincinnati, F. B. Dyer.
 Circleville, C. L. Boyer.
 Cleveland, Edwin F. Moulton (superintendent).
 Columbus, Jacob A. Shawan.
 Conneaut, C. T. Northrop.
 Coshocton, H. S. Piatt.
 Dayton, Edwin N. Brown.
 Defiance, R. W. Mitchell.
 Delaware, Horace A. Stokes.
 Delphos, T. W. Shimp.
 Dennison, H. Z. Hobson.
 East Liverpool, Robert E. Rayman.
 Elyria, W. R. Comings.
 Findlay, J. W. Zellar.

OHIO—Continued.

Fostoria, W. S. Robinson.
 Fremont, W. W. Ross.
 Galion, I. C. Guinther.
 Gallipolis, S. H. Layton.
 Glenville, H. H. Cully.
 Greenfield, Frank S. Alley.
 Greenville, John W. Swartz.
 Hamilton, S. L. Rose.
 Hillsboro, F. H. Warren.
 Ironton, S. P. Humphrey.
 Jackson, J. E. Kinnison.
 Kent, A. B. Stutzman.
 Kenton, Charles J. Britton.
 Lancaster, H. A. Cassidy.
 Lima, Charles C. Miller.
 Lorain, F. D. Ward.
 Mansfield, C. L. Van Cleve.
 Marietta, Elmer W. Jordan.
 Marion, H. L. Frank.
 Martins Ferry, J. H. Snyder.
 Massillon, C. A. Cronebaugh.
 Miamisburg, W. McK. Vance.
 Middletown, Arthur Powell.
 Mount Vernon, John K. Baxter.
 Nelsonville, Aaron Grady.
 Newark, J. D. Simkins.
 Newburg, B. F. Stevenson.
 New Philadelphia, G. C. Maurer.
 Niles, Frank J. Roller.
 Norwalk, A. D. Beechy.
 Norwood, W. S. Cadman.
 Oberlin, Ward H. Nye.
 Painesville, F. H. Kendall.
 Piqua, C. W. Bennett.
 Pomeroy, C. T. Coates.
 Portsmouth, J. I. Hudson.
 Ravenna, F. A. Merrill.
 St. Marys, E. A. Hotchkiss.
 Salem, Jesse L. Johnson.
 Sandusky, H. B. Williams.
 Shelby, W. S. Lynch.
 Sidney, H. R. McVay.
 Springfield, John S. Weaver.
 Steubenville, Edward M. Van Cleve.
 Tiffin, Charles A. Krout.
 Toledo, William Wallace Chalmers.
 Troy, Ralph M. Brown.
 Uhrichsville, L. E. Everett.
 Urbana, I. N. Keyser.
 Vanwert, J. P. Sharkey.
 Wapakoneta, H. H. Helter.
 Warren, C. E. Carey.
 Washington C. H., E. Lincoln Mendenhall.
 Wellston, Ezekiel Wallace Patterson.
 Wellsville, James L. MacDonald.
 Wooster, Charles Haupt.
 Xenia, Edwin B. Cox.
 Youngstown, N. H. Chaney.
 Zanesville, W. D. Lash.

OKLAHOMA.

Guthrie, Frank E. Buck.
 Oklahoma, Ed. S. Vaught.
 Perry, A. K. Gassom.

OREGON.

Astoria, A. L. Clark.
 Baker City, J. A. Churchill.
 Eugene, Mott H. Arnold.
 Pendleton, E. B. Conklin.
 Portland, Frank Rigler.
 Salem, L. R. Traver.

PENNSYLVANIA.

Allegheny, John Morrow.
 Allentown, Francis D. Raub.
 Altoona, D. S. Keith.
 Archbald, W. A. Kelly.
 Ashland, William C. Estler.
 Ashley, E. D. Bovard.
 Bangor, John W. Gruver (principal).
 Beaverfalls, Edward Maguire.
 Bellefonte, David O. Etters.
 Berwick, J. W. Snyder (supervising principal).
 Bethlehem, Fred W. Robbins.
 Blakely, H. B. Anthony (supervising principal;
 post-office, Peckville).
 Bloomsburg, L. P. Sterner (supervising principal).
 Braddock, Grant Norris.
 Bradford, E. E. Miller.
 Bristol, Louise D. Baggs.
 Butler, John A. Gibson.
 Carbondale, Elmer E. Garr.
 Carlisle, John C. Wagner.
 Carnegie, W. S. Bryan (principal).
 Catasauqua, H. J. Reinhard (principal).
 Chambersburg, Samuel Gelwix.
 Charleroi, J. A. Snodgrass (principal).
 Chester, A. Duncan Yocum.
 Clearfield, H. E. Trout.
 Coatesville, W. T. Gordon.
 Columbia, Daniel Fleisher.
 Connellsville, J. P. Wiley (principal).
 Conshohocken, E. B. Ziegler.
 Corry, W. W. Fell.
 Danville, U. L. Gordy.
 Dickson City, John E. Williams.
 Dubois, J. H. Alleman.
 Dunmore, C. F. Hoban.
 Duquesne, H. E. Winner (principal).
 Easton, William W. Cottingham.
 Edwardsdale, J. O. Hermann.
 Erie, H. C. Missimer.
 Etna, J. Q. A. Irvine (principal).
 Forest City, C. T. Thorpe (principal).
 Franklin, N. P. Kinsley.
 Freeland, E. F. Hanlon.
 Greensburg, Thomas S. March.
 Greenville, James J. Palmer.
 Hanover, Thomas F. Chrostwaite.
 Harrisburg, ———.
 Hazleton, David A. Harman.
 Homestead, James M. Norris.
 Huntingdon, E. R. Barclay.
 Indiana, James F. Chapman (principal).
 Jeannette, Theo. B. Shank.
 Johnsonburg, G. B. Gerberich (supervising principal).
 Johnstown, J. M. Berkey.
 Kane, T. E. Lytle.
 Kingston, George Evans (principal).

PENNSYLVANIA—Continued.

Kittanning, D. R. Sumstine.
 Lancaster, R. K. Buchrle.
 Lansford, A. A. Killian.
 Latrobe, A. A. Streng (principal).
 Lebanon, R. T. Adams.
 Lehighton, F. A. Ebert.
 Lewistown, W. F. Kennedy (supervising principal).
 Lockhaven, John A. Robb.
 Luzerne, Theron G. Osborne.
 McKeesport, J. Burdette Richey.
 McKees Rocks, F. H. Powers (principal).
 Mahanoy City, William N. Ehrhart.
 Mauch Chunk, E. W. Romberger (supervising principal).
 Meadville, Ulysses G. Smith.
 Middletown, H. J. Wickey.
 Millvale, J. C. R. Johnston (principal).
 Milton, A. Reist Rutt.
 Minersville, H. H. Spayd (supervising principal).
 Monongahela City, C. H. Wolford (principal).
 Mount Carmel, Samuel Halsey Dean.
 Mount Pleasant, S. Grant Miller (principal).
 Nanticoke, John William Griffith.
 New Brighton, J. W. F. Wilkinson.
 Newcasttle, J. W. Canon.
 New Kensington, A. D. Horton (principal).
 Norristown, Joseph K. Gotwals.
 Oil City, C. A. Babcock.
 Olyphant, M. W. Cummings.
 Philadelphia, Edward Brooks.
 Phoenixville, Harry F. Leister.
 Pittsburg, Samuel Andrews.
 Pittston, Robert Shiel (supervising principal).
 Plymouth, E. H. Scott.
 Pottstown, Wm. W. Rupert.
 Pottsville, B. F. Patterson.
 Punxsutawney, C. H. Donnell.
 Rankin, M. E. Thompson.
 Reading, Charles S. Foos.
 Renovo, Oden C. Gortner (supervising principal).
 Rochester, O. C. Lester.
 St. Clair, Thomas G. Jones.
 St. Marys, J. J. Lynch (supervising principal).
 Sayre, I. F. Stetler (supervising principal).
 Scottsdale, P. N. Osborne (principal).
 Scranton, Geo. W. Phillips.
 Sewickley, F. E. Fickinger.
 Shamokin, Jos. Howerth.
 Sharon, S. H. Hadley.
 Sharpsburg, C. C. Kelso (supervising principal).
 Shenandoah, J. W. Cooper.
 South Bethlehem, Owen R. Wilt.
 Steelton, L. E. McGinnes.
 Sunbury, Ira Shipman.
 Tamaqua, Robert F. Ditchburn.
 Tarentum, A. D. Endsley (principal).
 Taylor, M. J. Lloyd.
 Titusville, Henry Pease.
 Towanda, H. G. Padget (supervising principal).
 Tyrone, I. C. M. Ellenberger.
 Uniontown, H. F. Brooks.
 Warren, W. L. McGowan.
 Washington, William Krichbaum (principal).
 Waynesboro, J. Hassler Reber.
 Westchester, Addison L. Jones.

PENNSYLVANIA—Continued.

West Pittston, L. P. Bierly (principal).
 Wilkesbarre, James M. Coughlin.
 Wilkesburg, James L. Allison.
 Williamsport, Charles Lose.
 Wilmerding, W. G. Gans (principal).
 York, Atreus Wanner.

RHODE ISLAND.

Bristol, John Post Reynolds.
 Burrillville, Leroy G. Staples (post-office, Pascoag).
 Central Falls, Wendell A. Mowry.
 Coventry, John Matteson (post-office, Anthony).
 Cranston, Valentine Almy (post-office, Auburn).
 Cumberland, C. C. Richardson.
 East Providence, Allen P. Keith.
 Johnston, William H. Starr (post-office, Thornton).
 Lincoln, Frederick E. Bragdon.
 Newport, Herbert Warren Lull.
 North Kingstown, F. B. Cole (post-office, Wickford).
 Pawtucket, Maurice J. O'Brien.
 Providence, Walter H. Small.
 South Kingstown, B. E. Helme (post-office, Kingston).
 Warren, G. L. Church.
 Warwick, C. Edward Glover.
 Westerly, W. H. Holmes, jr.
 Woonsocket, Frank E. McFee.

SOUTH CAROLINA.

Abbeville, Leonard W. Dick.
 Anderson, Thomas C. Walton.
 Beaufort, Lueco Gunter.
 Charleston, Henry P. Archer.
 Chester, W. H. Hand.
 Columbia, E. S. Dreher.
 Florence, J. L. Mann.
 Gaffney, R. C. Sarratt.
 Georgetown, C. E. Johnson.
 Greenville, E. L. Hughes.
 Greenwood, Edward C. Coker.
 Laurens, B. L. Jones.
 Newberry, W. A. Stuckey.
 Orangeburg, A. J. Thackston.
 Rock Hill, J. C. Cork.
 Spartanburg, Frank Evans.
 Sumter, S. H. Edmunds.
 Union, Davis Jeffries.

SOUTH DAKOTA.

Aberdeen, W. L. Cochrane.
 Lead, E. C. Grubbs.
 Mitchell, F. H. Hoff.
 Sioux Falls, Frank C. McClelland.
 Yankton, R. C. Shellenbarger.

TENNESSEE.

Bristol, Richard Henry Watkins.
 Chattanooga, Sidney G. Gilbreath.
 Clarksville, Alfred Livingston.
 Columbia, W. E. Bostick (principal) and J. H. Kelly (principal).

TENNESSEE—Continued.

Jackson, G. R. McGee.
 Johnson City, J. E. Crouch.
 Knoxville, Albert Ruth.
 Memphis, George W. Gordon.
 Murfreesboro, J. W. W. Daniels.
 Nashville, H. C. Weber.

TEXAS.

Austin, A. N. McCallum.
 Beaumont, H. F. Triplett.
 Bonham, I. W. Evans.
 Breiham, Edward W. Tarrant.
 Brownsville, Thomas P. Barbour (principal).
 Brownwood, George H. Carpenter.
 Cleburne, V. M. Fulton.
 Corpus Christi, Charles W. Crossley.
 Corsicana, J. W. Cartwell.
 Dallas, J. L. Long.
 Denison, F. B. Hughes.
 Denton, J. S. Carlisle.
 El Paso, G. P. Putnam.
 Ennis, W. E. Edelen.
 Fort Worth, Alex. Hogg.
 Gainesville, E. F. Comegys.
 Galveston, John W. Hopkins.
 Gonzales, Thomas H. Lewis.
 Greenville, George A. Newton.
 Hillsboro, W. D. Butler.
 Houston, P. W. Horn.
 Laredo, L. J. Christen.
 McKinney, J. H. Hill.
 Marshall, W. H. Attebery.
 Navasota, W. B. Bizzell.
 Orange, S. B. Foster.
 Palestine, Wilbur F. Wilson.
 Paris, J. G. Wooten.
 San Antonio, L. E. Wolfe.
 Sherman, B. W. Glasgow.
 Taylor, W. M. Williams.
 Temple, James E. Binkley.
 Terrell, S. M. N. Marrs.
 Texarkana, W. Owens.
 Tyler, J. L. Henderson.
 Victoria, Felix E. Smith.
 Waco, J. C. Lattimore.
 Waxahatchie, Walter Acker.
 Weatherford, T. W. Stanley.

UTAH.

Logan, D. C. Jensen.
 Ogden, William Allison.
 Park City, Clarence A. Blocher.
 Provo, William S. Rawlings.
 Salt Lake City, D. H. Christensen.

VERMONT.

Barre, O. D. Mathewson.
 Bellows Falls, B. E. Merriam.
 Bennington, Albert W. Varney.
 Brattleboro, Miss Marguerite Tucker (supervisor).
 Burlington, Henry O. Wheeler.
 Montpelier, E. G. Ham.
 Rutland, Willard A. Frazier.
 St. Albans, F. J. Sagendorph.
 St. Johnsbury, Clarence H. Dempsey.

VIRGINIA.

Alexandria, Kosciusko Kemper.
 Bristol, E. H. Russell.
 Charlottesville, John S. Patton.
 Danville, Abner Anderson.
 Fredericksburg, Benjamin P. Willis.
 Lynchburg, E. C. Glass.
 Manchester, David L. Pulliam.
 Newport News, John Sheldon Jones.
 Norfolk, Richard A. Dobie.
 Petersburg, D. M. Brown.
 Portsmouth, John C. Ashton.
 Richmond, William F. Fox.
 Roanoke, Bushrod Rust.
 Staunton, Francis H. Smith, jr.
 Suffolk, Lee Britt (county superintendent).
 Winchester, Maurice M. Lynch.

WASHINGTON.

Aberdeen, R. E. Harris.
 Ballard, J. C. Dickson.
 Bellingham, W. J. Hughes.
 Everett, George E. St. John.
 Olympia, W. W. Montgomery.
 Seattle, Frank B. Cooper.
 Spokane, J. A. Tormey.
 Tacoma, A. B. Warner.
 Vancouver, C. W. Shumway.
 Walla Walla, O. S. Jones.

WEST VIRGINIA.

Benwood, Charles E. Carrigan (principal).
 Bluefield, C. A. Fulwider.
 Charleston, George S. Laidley.
 Clarksburg, F. L. Burdette.
 Fairmont, Joseph Rosier.
 Grafton, Hayward Fleming.
 Hinton, George W. Lilly (county superintendent).
 Huntington, W. H. Cole.
 Martinsburg, C. H. Cole.
 Moundsville, W. M. Henderson.
 Parkersburg, U. S. Fleming.
 Wheeling, H. B. Work.

WISCONSIN.

Antigo, Myron E. Keats.
 Appleton, Carrie E. Morgan.

WISCONSIN—Continued.

Ashland, J. T. Hooper.
 Baraboo, G. W. Gehrand.
 Beaverdam, Homer B. Hubbell.
 Beloit, Franklin E. Converse.
 Berlin, C. H. Wright.
 Chippewa Falls, Silas B. Tobey.
 Depere:
 East Side, E. F. O'Brien.
 West Side, J. V. Brennan.
 Eau Claire, M. N. McIver.
 Fond du Lac, William Wilson.
 Grand Rapids, H. S. Yonker.
 Greenbay, A. W. Burton.
 Janesville, H. C. Buell.
 Kaukauna, A. M. Olson.
 Kenosha, Norman L. Baker.
 La Crosse, John P. Bird.
 Madison, R. B. Dudgeon.
 Manitowoc, Walter E. Larson.
 Marinette, G. H. Landgraf.
 Marshfield, J. B. Borden.
 Menasha, John Callahan.
 Menominee, L. D. Harvey.
 Merrill, W. H. Schulz.
 Milwaukee, C. G. Pearse.
 Monroe, G. W. Swartz.
 Neenah, J. N. Stone.
 Oconto, Asa M. Royce.
 Oshkosh, H. A. Simonds.
 Portage, W. G. Clough (principal).
 Racine, Burton E. Nelson.
 Rhinelander, F. A. Lowell.
 Sheboygan, H. F. Leverenz.
 Stevens Point, F. F. Showers.
 Superior, B. B. Jackson.
 Washburn, D. E. Cameron.
 Watertown, Charles F. Viebahn.
 Waukesha, H. L. Terry (principal).
 Wausau, Karl Mathie.

WYOMING.

Cheyenne, H. E. Conard.
 Laramie, Frank W. Lee.
 Rock Springs, S. M. Abbott.

III.—COLLEGE PRESIDENTS.

1.—Colleges for men and coeducational colleges of liberal arts.

Name of president.	University or college.	Address.
A. P. Montague, LL. D.	Howard College	Eastlake, Ala.
Rev. S. M. Hosmer, D. D.	Southern University	Greensboro, Ala.
Rev. Benedict Menges, O. S. B.	St. Bernard College	St. Bernard, Ala.
Rev. William Tyrrell, S. J.	Spring Hill College	Springhill, Ala.
John W. Abercrombie, LL. D.	University of Alabama	University, Ala.
Kendric C. Babcock, Ph. D.	University of Arizona	Tucson, Ariz.
J. H. Hineman, A. M., chairman	Henderson College	Arkadelphia, Ark.
John W. Conger, LL. D.	Ouachita College	Do.
Eugene R. Long, Ph. D.	Arkansas College	Batesville, Ark.
Rev. E. H. Liles	Arkansas Cumberland College	Clarksville, Ark.
Rev. S. Anderson, A. B.	Hendrix College	Conway, Ark.
Henry S. Hartzog, LL. D.	University of Arkansas	Fayetteville, Ark.
Rev. J. M. Cox, D. D.	Philander Smith College	Little Rock, Ark.
B. I. Wheeler, LL. D.	University of California	Berkeley, Cal.
Rev. George A. Gates, LL. D.	Pomona College	Claremont, Cal.
Rev. G. W. Wadsworth, D. D.	Occidental College	Los Angeles, Cal.
Rev. J. S. Glass, C. M., D. D.	St. Vincent's College	Do.
Rev. George F. Bovard, D. D.	University of Southern California	Do.
Rev. T. G. Brownson, D. D.	California College	Oakland, Cal.
Walter A. Edwards, LL. D.	Throop Polytechnic Institute	Pasadena, Cal.
Rev. John P. Frieden, S. J.	St. Ignatius College	San Francisco, Cal.
Rev. Eli McClish, D. D.	University of the Pacific	San Jose, Cal.
Rev. Robert E. Kenna, S. J.	Santa Clara College	Santa Clara, Cal.
D. S. Jordan, LL. D.	Leland Stanford Junior University	Stanford University, Cal.
James H. Baker, LL. D.	University of Colorado	Boulder, Colo.
Rev. W. F. Stocum, LL. D.	Colorado College	Colorado Springs, Colo.
Rev. A. J. Schuler, S. J.	College of the Sacred Heart	Denver, Colo.
Rev. Henry A. Buchtel, LL. D., chancellor.	University of Denver	University Park, Colo.
Flavel S. Luther, LL. D.	Trinity College	Hartford, Conn.
Rev. B. P. Raymond, LL. D.	Wesleyan University	Middletown, Conn.
Arthur T. Hadley, LL. D.	Yale University	New Haven, Conn.
Rev. W. C. Jason, A. M.	State College for Colored Students	Dover, Del.
Geo. A. Harter, Ph. D.	Delaware College	Newark, Del.
Rev. Dennis J. O'Connell, S. T. D., rector.	Catholic University of America	Washington, D. C.
E. M. Gallaudet, LL. D.	Gallaudet College	Do.
Rev. Jerome Daugherty, S. J.	Georgetown University	Do.
Charles W. Needham, LL. D.	George Washington University	Do.
Rev. Edward X. Fink, S. J.	Gonzaga College	Do.
Rev. John Gordon, D. D.	Howard University	Do.
Rev. Brother Germanus, F. S. C.	St. John's College	Do.
Lincoln Hulley, Ph. D.	John B. Stetson University	Deland, Fla.
Andrew Sledd, Ph. D.	University of Florida	Lake City, Fla.
Rev. Charles H. Mohr, Ph. D.	St. Leo College	St. Leo, Fla.
A. A. Murphree, A. M.	Florida State College	Tallahassee, Fla.
Rev. Wm. F. Blackman, Ph. D.	Rollins College	Winterpark, Fla.
Walter B. Hill, LL. D., chancellor.	University of Georgia	Athens, Ga.
Rev. George Sale, A. M.	Atlanta Baptist College	Atlanta, Ga.
Rev. Horace Bumstead, D. D.	Atlanta University	Do.
Rev. J. S. Flipper, D. D.	Morris Brown College	Do.
W. Claude Williams, A. B.	Bowdon College	Bowdon, Ga.
G. R. Glenn	North Georgia Agricultural College	Dahlonega, Ga.
P. D. Pollock, LL. D.	Mercer University	Macon, Ga.
Rev. J. E. Dickey, D. D.	Emory College	Oxford, Ga.
W. H. Crogman, Litt. D.	Clark University	South Atlanta, Ga.
William F. Quillian, jr., A. B.	Nannie Lou Warthen Institute	Wrightsville, Ga.
Rev. Joseph A. Sharp, A. B.	Young Harris College	Young Harris, Ga.
James A. MacLean, Ph. D.	University of Idaho	Moscow, Idaho.
Rev. Harry B. Gough, A. B.	Hedding College	Abingdon, Ill.
Rev. E. M. Smith, D. D.	Illinois Wesleyan University	Bloomington, Ill.
Rev. M. J. Marsile, C. S. V.	St. Viateur's College	Bourbonnais, Ill.
W. H. Bradley, Ph. D., dean	Blackburn College	Carlinville, Ill.
Rev. Fred L. Sigmund, D. D.	Carthage College	Carthage, Ill.
Rev. Henry J. Dumbach, S. J.	St. Ignatius College	Chicago, Ill.
Rev. John Kruszynski, C. R.	St. Stanislaus College	Do.
Rev. Wm. R. Harper, LL. D.	University of Chicago	Do.
A. R. Taylor, Ph. D.	James Millikin University	Decatur, Ill.
D. R. Bebout	Austin College	Effingham, Ill.
Rev. Daniel Irion	Evangelical Proseminary	Einhurst, Ill.
Robert E. Hieronymus, A. M.	Eureka College	Eureka, Ill.
	Northwestern University	Evanston, Ill.
Rev. J. A. Leavitt, D. D.	Ewing College	Ewing, Ill.
Rev. Thomas McClelland, D. D.	Knox College	Galesburg, Ill.
Rev. Charles E. Nash, S. T. D.	Lombard College	Do.
Wilson T. Hogue, Ph. B.	Greenville College	Greenville, Ill.
	Illinois College	Jacksonville, Ill.
Rev. Richard D. Harlan, LL. D.	Lake Forest College	Lake Forest, Ill.
M. H. Chamberlin, LL. D.	McKendree College	Lebanon, Ill.

III.—COLLEGE PRESIDENTS—Continued.

1.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Rev. J. L. Goodknight, D. D.	Lincoln College	Lincoln, Ill.
Rev. Thos. H. McMichael, D. D.	Monmouth College	Monmouth, Ill.
Rev. H. J. Klekhoefer, Ph. D.	Northwestern College	Naperville, Ill.
Rev. John Miller, O. S. B., rector	St. Bede College	Peru, Ill.
Rev. Anselm Mueller, O. S. F.	St. Francis Solanus College	Quincy, Ill.
Gustav A. Andreen, Ph. D.	Augustana College	Rock Island, Ill.
Rev. Samuel Macke, O. S. F., rector	St. Joseph's College	Tentopolis, Ill.
Rev. Stanley A. McKay, D. D.	Shurtleff College	Upper Alton, Ill.
Edmund J. James, LL. D.	University of Illinois	Urbana, Ill.
W. R. Shuey, A. M.	Westfield College	Westfield, Ill.
Rev. C. A. Blanchard, D. D.	Wheaton College	Wheaton, Ill.
William L. Bryan, Ph. D.	Indiana University	Bloomington, Ind.
Rev. Augustine Seifert, C. P. S.	St. Joseph's College	Collegeville, Ind.
Rev. Wm. P. Kane, LL. D.	Wabash College	Crawfordsville, Ind.
Rev. Martin Luecke	Concordia College	Fort Wayne, Ind.
Rev. William T. Stott, LL. D.	Franklin College	Franklin, Ind.
Rev. E. H. Hughes, S. T. D.	De Pauw University	Greencastle, Ind.
Rev. D. W. Fisher, LL. D.	Hanover College	Hanover, Ind.
W. E. Garrison, Ph. D.	Butler College	Irrvington, Ind.
Rev. C. J. Jones, D. D.	Union Christian College	Merom, Ind.
Rev. Frank C. English, D. D.	Moores Hill College	Moores Hill, Ind.
Rev. A. Morrissey, C. S. C.	University of Notre Dame	Notre Dame, Ind.
Robert L. Kelly, Ph. M.	Earlham College	Richmond, Ind.
Rev. A. Schmitt, O. S. B.	St. Meinrad College	St. Meinrad, Ind.
Rev. C. W. Winchester, D. D.	Taylor University	Upland, Ind.
J. H. Scott, A. B.	Indian University	Bacone, Ind. T.
Rev. A. Grant Evans	Henry Kendall College	Muscooge, Ind. T.
Rev. Frank E. Hirsch, D. D.	Coe College	Cedar Rapids, Iowa.
O. Kraushaar	Charles City College	Charles City, Iowa.
Rev. R. T. Campbell, D. D.	Warburg College	Clinton, Iowa.
Rev. C. K. Preus	Amity College	College Springs, Iowa.
Hill M. Bell, A. M.	Luther College	Decorah, Iowa.
Rev. W. E. Parsons, D. D.	Des Moines College	Des Moines, Iowa.
Rev. T. J. Bassett, D. D.	Drake University	Do.
Rev. Dan F. Bradley, D. D.	St. Joseph's College	Dubuque, Iowa.
Rev. F. W. Grossman, A. B.	Parsons College	Fairfield, Iowa.
Charles E. Shelton, LL. D.	Upper Iowa University	Fayette, Iowa.
Geo. E. MacLean, LL. D.	Iowa College	Grinnell, Iowa.
Ernest R. Downs, A. M.	Lenox College	Hopkinton, Iowa.
Carlyle Summerbell, A. M.	Simpson College	Indianola, Iowa.
Rev. E. S. Havighorst, D. D.	State University of Iowa	Iowa City, Iowa.
Rev. John W. Hancher, S. T. D.	Graceland College	Lamoni, Iowa.
Rev. Wm. F. King, LL. D.	Palmer College	LeGrand, Iowa.
A. Rosenberger, A. B.	German College	Mount Pleasant, Iowa.
L. A. Garrison, A. B.	Iowa Wesleyan University	Do.
Rev. W. S. Lewis, D. D.	Cornell College	Mount Vernon, Iowa.
Rev. E. E. Reed, D. D.	Penn College	Oskaloosa, Iowa.
George N. Ellis, A. M.	Central University of Iowa	Pella, Iowa.
Rev. L. Bookwalter, D. D.	Morningside College	Sioux City, Iowa.
Rev. Millard F. Troxell, D. D.	Buena Vista College	Storm Lake, Iowa.
Rev. I. Wolf, O. S. B., D. D.	Tabor College	Tabor, Iowa.
Rev. L. H. Murlin, D. D.	Western College	Toledo, Iowa.
Rev. J. C. Miller, D. D.	Midland College	Atchison, Kans.
Amos A. Davis, A. M.	St. Benedict's College	Do.
P. O. Bonebrake, A. M.	Baker University	Baldwin, Kans.
Rev. D. S. Stephens, D. D., chan- cellor.	College of Emporia	Emporia, Kans.
Frank Strong, Ph. D.	Highland University	Highland, Kans.
T. W. Bellingham, Ph. D.	Campbell College	Holton, Kans.
Rev. Ernst F. Philblad, A. M.	Kansas City University	Kansas City, Kans.
J. D. S. Riggs, L. H. D.	University of Kansas	Lawrence, Kans.
Rev. James McCabe, S. J.	Kansas Christian College	Lincoln, Kans.
Thomas W. Roach, A. M.	Bethany College	Lindsborg, Kans.
Rev. F. M. Spencer, D. D.	Ottawa University	Ottawa, Kans.
Rev. Norman Plass, D. D.	St. Mary's College	St. Marys, Kans.
Rev. N. J. Morrison, LL. D.	Kansas Wesleyan University	Salina, Kans.
Edmund Stanley, A. M.	Cooper Memorial College	Sterling, Kans.
Rev. A. W. Meyer	Washburn College	Topeka, Kans.
George F. Cook, Ph. D.	Fairmount College	Wichita, Kans.
Rev. J. P. Faulkner, A. M.	Friends University	Do.
Rev. Wm. G. Frost, Ph. D.	St. John's Lutheran College	Winfield, Kans.
Frederick W. Hinitz, Ph. D.	Southwest Kansas College	Do.
Rev. J. J. Taylor, LL. D.	Union College	Barbourville, Ky.
Rev. Geo. J. Burnett, A. M.	Berea College	Berea, Ky.
A. C. Kuykendall, A. B.	Central University of Kentucky	Danville, Ky.
Rev. Burris A. Jenkins, A. M., B. D.	Georgetown College	Georgetown, Ky.
	Liberty College	Glasgow, Ky.
	South Kentucky College	Hopkinsville, Ky.
	Kentucky University	Lexington, Ky.

III.—COLLEGE PRESIDENTS—Continued.

1.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
J. K. Patterson, LL. D.	State College of Kentucky	Lexington, Ky.
William H. Harrison, A. M.	Bethel College	Russellville, Ky.
Rev. Michael Jaglowicz, C. R.	St. Mary's College	St. Marys, Ky.
Rev. John L. Weber, Litt. D.	Kentucky Wesleyan College	Winchester, Ky.
Thomas D. Boyd, LL. D.	Louisiana State University	Baton Rouge, La.
Rev. M. Thounvenh, S. M.	Jefferson College	Convent, La.
Rev. C. C. Miller	Centenary College of Louisiana	Jackson, La.
Rev. Henry S. Maring, S. J.	College of the Immaculate Conception	New Orleans, La.
R. W. Perkins, Ph. D.	Leland University	Do.
Frederic H. Knight, Ph. D.	New Orleans University	Do.
E. B. Craighead, LL. D.	Tulane University of Louisiana	Do.
Rev. Wm. D. Hyde, LL. D.	Bowdoin College	Brunswick, Me.
Rev. G. C. Chase, LL. D.	Bates College	Lewiston, Me.
George E. Fellows, LL. D.	University of Maine	Orono, Me.
Rev. Charles L. White, D. D.	Colby College	Waterville, Me.
Thomas Fell, LL. D.	St. John's College	Annapolis, Md.
Ira Remsen, LL. D.	Johns Hopkins University	Baltimore, Md.
Rev. John F. Quirk, S. J.	Loyola College	Do.
Rev. John O. Spencer, Ph. D.	Morgan College	Do.
James W. Cain, LL. D.	Washington College	Chestertown, Md.
R. W. Silvester	Maryland Agricultural College	Collegepark, Md.
Rev. Brother Abraham	Rock Hill College	Ellicott City, Md.
Rev. C. B. Schrantz, S. S.	St. Charles College	Do.
Rev. Wm. L. O'Hara, LL. D.	Mount St. Mary's College	Emmitsburg, Md.
Rev. James Fraser, Ph. D.	New Windsor College	New Windsor, Md.
Rev. Thomas H. Lewis, D. D.	Western Maryland College	Westminster, Md.
Rev. George Harris, LL. D.	Amherst College	Amherst, Mass.
Rev. William Gannon, S. J.	Boston College	Boston, Mass.
Rev. W. E. Huntington, Ph. D.	Boston University	Do.
Charles W. Eliot, LL. D.	Harvard University	Cambridge, Mass.
Rev. Samuel H. Lee, A. M.	French-American College	Springfield, Mass.
Rev. Henry Hopkins, D. D.	Tufts College	Tufts College, Mass.
G. Stanley Hall, LL. D.	Williams College	Williamstown, Mass.
Carroll D. Wright, LL. D.	Clark University	Worcester, Mass.
	Collegiate Department of Clark University	Do.
Rev. Joseph F. Hanselman, S. J.	College of the Holy Cross	Do.
Rev. B. W. Anthony, D. D.	Adrian College	Adrian, Mich.
Samuel Dickie, LL. D.	Albion College	Albion, Mich.
Rev. August F. Bruske, D. D.	Alma College	Alma, Mich.
James B. Angell, LL. D.	University of Michigan	Ann Arbor, Mich.
Rev. Louis J. Kellinger, S. J.	Detroit College	Detroit, Mich.
Joseph W. Mauck, LL. D.	Hillsdale College	Hillsdale, Mich.
Gerrit J. Kollen, LL. D.	Hope College	Holland, Mich.
A. G. Slocum, LL. D.	Kalamazoo College	Kalamazoo, Mich.
E. G. Lancaster, Ph. D.	Olivet College	Olivet, Mich.
Rev. P. Engel, O. S. B., Ph. D.	St. John's University	Collegeville, Minn.
Georg Sverdrup	Augsburg Seminary	Minneapolis, Minn.
Cyrus Northrop, LL. D.	University of Minnesota	Do.
Rev. Wm. H. Sallmon, A. M.	Carleton College	Northfield, Minn.
Rev. John N. Kildahl	St. Olaf College	Do.
Rev. Geo. H. Bridgman, LL. D.	Hamline University	St. Paul, Minn.
James Wallace, Ph. D.	Macalester College	Do.
Rev. P. A. Mattson, B. D.	Gustavus Adolphus College	St. Peter, Minn.
Rev. E. W. Van Aken, A. M., B. D.	Parker College	Winnebago City, Minn.
Rev. Wm. T. Lowrey, D. D.	Mississippi College	Clinton, Miss.
Rev. Wm. W. Foster, jr., D. D.	Rust University	Holly Springs, Miss.
Rev. W. B. Murrah, LL. D.	Millsaps College	Jackson, Miss.
R. B. Fulton, LL. D., chancellor	University of Mississippi	University, Miss.
Ernest W. Dow, Ph. D.	Southwest Baptist College	Bolivar, Mo.
W. M. Jones, Ph. D.	Pike College	Bowling Green, Mo.
Rev. B. W. Baker, Ph. D.	Missouri Wesleyan College	Cameron, Mo.
Carl Johann, LL. D.	Christian University	Canton, Mo.
Rev. J. E. Dillard, A. B.	Clarksburg College	Clarksburg, Mo.
Richard H. Jesse, LL. D.	University of Missouri	Columbia, Mo.
Rev. James C. Morris, D. D.	Central College	Fayette, Mo.
Rev. D. R. Kerr, Ph. D.	Westminster College	Fulton, Mo.
Hon. U. S. Hall, A. B.	Pritchett College	Glasgow, Mo.
Jere T. Muir, LL. D.	Lagrange College	Lagrange, Mo.
Rev. J. P. Greenc, LL. D.	William Jewell College	Liberty, Mo.
Rev. Wm. H. Black, LL. D.	Missouri Valley College	Marshall, Mo.
W. W. Thomas	Morrisville College	Morrisville, Mo.
	Odessa College	Odessa, Mo.
L. M. McAfee, LL. D.	Park College	Parkville, Mo.
Rev. Brother Justin	Christian Brothers College	St. Louis, Mo.
Rev. W. B. Rogers, S. J.	St. Louis University	Do.
W. S. Chaplin, LL. D., chancellor	Washington University	Do.
Rev. Homer T. Fuller, Ph. D.	Drury College	Springfield, Mo.
Rev. J. A. Thompson, D. D.	Tarkio College	Tarkio, Mo.
Rev. Geo. B. Addicks, D. D.	Central Wesleyan College	Warrenton, Mo.

III.—COLLEGE PRESIDENTS—Continued.

1.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Oscar J. Craig, Ph. D.	University of Montana	Missoula, Mont.
W. P. Aylsworth, LL. D.	Bellevue College	Bellevue, Nebr.
C. C. Lewis, B. S.	Cotner University	Bethany, Nebr.
Rev. David B. Perry, D. D.	Union College	College View, Nebr.
Rev. Geo. Sutherland, D. D.	Doane College	Crete, Nebr.
Rev. E. Van Dyke Wight, A. M.	Grand Island College	Grand Island, Nebr.
Rev. E. B. Andrews, LL. D., chancellor.	Hastings College	Hastings, Nebr.
Rev. M. P. Dowling, S. J.	University of Nebraska	Lincoln, Nebr.
Rev. D. W. C. Huntington, LL. D., chancellor.	Creighton University	Omaha, Nebr.
Rev. Wm. E. Schell, D. D.	Nebraska Wesleyan University	University Place, Nebr.
Rev. J. E. Stubbs, LL. D.	York College	York, Nebr.
Rev. W. J. Tucker, LL. D.	State University of Nevada	Reno, Nev.
Rev. Abbot Hilary, O. S. B., D. D.	Dartmouth College	Hanover, N. H.
Rev. J. W. Fox, S. J.	St. Anselm's College	Manchester, N. H.
Rev. G. Bien, O. S. B., director.	St. Peter's College	Jersey City, N. J.
Austin Scott, LL. D.	St. Benedict's College	Newark, N. J.
Woodrow Wilson, LL. D.	Rutgers College	New Brunswick, N. J.
Rev. John A. Stafford, S. T. L.	Princeton University	Princeton, N. J.
William G. Tight, Ph. D.	Seton Hall College	South Orange, N. J.
Rev. B. C. Davis, Ph. D.	University of New Mexico	Albuquerque, N. Mex.
Rev. Joseph F. Butler, O. F. M.	Alfred University	Alfred, N. Y.
Rev. Thomas R. Harris, D. D.	St. Bonaventure's College	Allegany, N. Y.
C. H. Levermore, Ph. D.	St. Stephen's College	Annapdale, N. Y.
F. W. Atkinson, Ph. D.	Adelphi College	Brooklyn, N. Y.
Brother Linus, O. S. F.	Polytechnic Institute of Brooklyn	Do.
Rev. Patrick McHale, C. M.	St. Francis College	Do.
Rev. Aloysius J. Pfeil, S. J.	St. John's College	Do.
Rev. Almon Gunnison, LL. D.	Canisius College	Buffalo, N. Y.
Rev. M. W. Stryker, LL. D.	St. Lawrence University	Canton, N. Y.
Rev. L. C. Stewardson, LL. D.	Hamilton College	Clinton, N. Y.
Rev. Geo. E. Merrill, LL. D.	Hobart College	Geneva, N. Y.
J. G. Schurman, LL. D.	Colgate University	Hamilton, N. Y.
Rev. D. W. Hearn, S. J.	Cornell University	Ithaca, N. Y.
John H. Finley, LL. D.	College of St. Francis Xavier	New York, N. Y.
Nicholas M. Butler, LL. D.	College of the City of New York	Do.
Rev. Brother Edward, F. S. C.	Columbia University	Do.
Rev. John J. Collins, S. J.	Manhattan College	Do.
Rev. H. M. MacCracken, LL. D., chancellor.	St. John's College	Do.
Rev. W. F. Likly, C. M.	New York University	Do.
Rev. Rush Rhees, LL. D.	Niagara University	Niagara University, N. Y.
Rev. A. V. V. Raymond, LL. D.	University of Rochester	Rochester, N. Y.
Rev. J. R. Day, LL. D., chancellor.	Union College	Schenectady, N. Y.
Rev. Leo Haid, D. D., O. S. B.	Syracuse University	Syracuse, N. Y.
F. P. Venable, LL. D.	St. Mary's College	Belmont, N. C.
Rev. D. J. Sanders, D. D.	University of North Carolina	Chapelhill, N. C.
Henry L. Smith, Ph. D.	Biddle University	Charlotte, N. C.
Rev. John C. Kilgo, D. D.	Davidson College	Davidson, N. C.
Rev. W. W. Staley, D. D.	Trinity College	Durham, N. C.
L. Lyndon Hobbs, A. M.	Elon College	Elon College, N. C.
Rev. R. L. Fritz, A. M.	Guilford College	Guilford College, N. C.
Rev. George A. Snyder, A. M.	Lenoir College	Hickory, N. C.
Chas. F. Meserve, LL. D.	Catawba College	Newton, N. C.
Rev. William H. Goler, LL. D.	Shaw University	Raleigh, N. C.
Rev. C. E. Taylor, D. D.	Livingstone College	Salisbury, N. C.
James M. Robeson	Wake Forest College	Wake Forest, N. C.
Rev. John H. Morley, LL. D.	Weaverville College	Weaverville, N. C.
W. Merrifield, A. M.	Fargo College	Fargo, N. Dak.
Rev. E. P. Robertson, D. D.	University of North Dakota	University, N. Dak.
Rev. A. B. Church, D. D.	Red River Valley University	Wahpeton, N. Dak.
Rev. Albert B. Riker, D. D.	Buchtel College	Akron, Ohio.
Alston Ellis, LL. D.	Mount Union College	Alliance, Ohio.
Rev. G. A. Reeder, D. D., chancellor.	Ohio University	Athens, Ohio.
Rev. C. Riemenschnneider, Ph. D.	Baldwin University	Berea, Ohio.
Rev. David McKinney, D. D.	German Wallace College	Do.
Rev. Albert A. Dierckes, S. J.	Cedarville College	Cedarville, Ohio.
Chas. W. Dabney, LL. D.	St. Xavier College	Cincinnati, Ohio.
Rev. John I. Zahm, S. J.	University of Cincinnati	Do.
Rev. C. F. Thwing, LL. D.	St. Ignatius College	Cleveland, Ohio.
Rev. L. H. Schuh, Ph. D.	Western Reserve University	Do.
Rev. W. O. Thompson, LL. D.	Capital University	Columbus, Ohio.
Rev. Louis A. Tragger, S. M.	Ohio State University	Do.
P. W. McReynolds, A. M.	St. Mary's Institute	Dayton, Ohio.
Rev. Herbert Welch, D. D.	Defiance College	Defiance, Ohio.
Rev. C. I. Brown, A. M.	Ohio Wesleyan University	Delaware, Ohio.
Rev. Wm. F. Peirce, L. H. D.	Findlay College	Findlay, Ohio.
	Kenyon College	Gambier, Ohio.

III.—COLLEGE PRESIDENTS—Continued.

1.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
Rev. Emory W. Hunt, LL. D.	Denison University	Granville, Ohio.
E. B. Wakefield, A. M.	Hiram College	Hiram, Ohio.
O. G. Schoenlein, A. B.	Lima College	Lima, Ohio.
Rev. Alfred T. Perry, D. D.	Marietta College	Marietta, Ohio.
Rev. N. B. Kelly, D. D.	Franklin College	New Athens, Ohio.
L. J. Graham, A. M.	Muskingum College	New Concord, Ohio.
Rev. Henry C. King, D. D.	Oberlin College	Oberlin, Ohio.
Rev. Guy P. Benton, D. D.	Miami University	Oxford, Ohio.
Rev. G. W. MacMillan, Ph. D.	Richmond College	Richmond, Ohio.
Rev. J. M. Davis, Ph. D.	Rio Grande College	Rio Grande, Ohio.
Rev. I. C. Paugh, Ph. D.	Scio College	Scio, Ohio.
Rev. Charles G. Heckert, D. D.	Wittenberg College	Springfield, Ohio.
Rev. Charles E. Miller, D. D.	Heidelberg University	Tiffin, Ohio.
Rev. L. Bookwalter, D. D.	Otterbein University	Westerville, Ohio.
Rev. Joshua H. Jones, D. D.	Wilberforce University	Wilberforce, Ohio.
Rev. Albert J. Brown, D. D.	Wilmington College	Wilmington, Ohio.
Rev. Louis E. Holden, LL. D.	University of Wooster	Wooster, Ohio.
Stephen F. Weston, Ph. D.	Antioch College	Yellow Springs, Ohio.
D. R. Boyd, Ph. D.	University of Oklahoma	Norman, Okla.
Wallace H. Lee, LL. D.	Albany College	Albany, Oreg.
Rev. C. C. Poling, Ph. D.	Dallas College	Dallas, Oreg.
Prince L. Campbell, A. B.	University of Oregon	Eugene, Oreg.
Wm. N. Ferrin, LL. D.	Pacific University	Forest Grove, Oreg.
A. M. Brumback, A. M.	McMinnville College	McMinnville, Oreg.
Edwin McGrew, M. S.	Pacific College	Newberg, Oreg.
I. E. Caldwell, A. B.	Philomath College	Philomath, Oreg.
Rev. John H. Coleman, D. D.	Willamette University	Salem, Oreg.
Rev. S. B. McCormick, LL. D., chan- cellor.	Western University of Pennsylvania	Allegheny, Pa.
Rev. J. W. A. Haas, D. D.	Muhlenberg College	Allentown, Pa.
Rev. H. U. Roop, Ph. D.	Lebanon Valley College	Annnville, Pa.
Rev. Leander Schnerr, O. S. B.	St. Vincent College	Beatty, Pa.
Rev. Arthur Staples, A. M.	Beaver College	Beaver, Pa.
Rev. W. P. Johnston, D. D.	Geneva College	Beaverfalls, Pa.
Rev. Aug. Schultze, L. H. D.	Moravian College	Bethlehem, Pa.
Rev. G. E. Reed, LL. D.	Dickinson College	Carlisle, Pa.
Col. C. E. Hyatt, C. E.	Pennsylvania Military College	Chester, Pa.
Rev. D. W. Ebbert, D. D.	Ursinus College	Collegeville, Pa.
Rev. E. D. Warfield, LL. D.	Lafayette College	Easton, Pa.
Rev. Samuel G. Hefelbower, A. M.	Pennsylvania College	Gettysburg, Pa.
Rev. I. C. Kettler, Ph. D.	Grove City College	Grove City, Pa.
Isaac Sharpless, LL. D.	Haverford College	Haverford, Pa.
I. H. Brumbaugh, A. M., acting.	Juniata College	Huntingdon, Pa.
Rev. J. S. Stahr, Ph. D.	Franklin and Marshall College	Lancaster, Pa.
John H. Harris, LL. D.	Bucknell University	Lewisburg, Pa.
Rev. Isaac N. Rendall, D. D.	Lincoln University	Lincoln University, Pa.
Rev. Wm. H. Crawford, D. D.	Allegheny College	Meadville, Pa.
Rev. James D. Woodring, D. D.	Albright College	Myerstown, Pa.
Rev. R. G. Ferguson, D. D.	Westminster College	New Wilmington, Pa.
Rev. R. E. Thompson, S. T. D.	Central High School	Philadelphia, Pa.
Brother Wolfred	La Salle College	Do.
C. C. Harrison, LL. D., provost.	University of Pennsylvania	Do.
Rev. M. A. Hehir, C. S. Sp.	Holy Ghost College	Pittsburg, Pa.
Rev. John B. Focht, D. D.	Susquehanna University	Selinsgrove, Pa.
G. W. Atherton, LL. D.	Lehigh University	South Bethlehem, Pa.
Joseph Swain, LL. D.	Pennsylvania State College	State College, Pa.
Rev. L. A. Delurey, O. S. A.	Swarthmore College	Swarthmore, Pa.
C. F. Ball, A. M.	Villanova College	Villanova, Pa.
Rev. J. D. Moffat, LL. D.	Volant College	Volant, Pa.
A. F. Lewis, Ph. D.	Washington and Jefferson College	Washington, Pa.
Rev. W. H. P. Faunce, LL. D.	Waynesburg College	Waynesburg, Pa.
Harrison Randolph, LL. D.	Brown University	Providence, R. I.
A. E. Spencer, A. M., vice-pres.	College of Charleston	Charleston, S. C.
	Presbyterian College of South Caro- lina.	Clinton, S. C.
Rev. Wm. D. Johnson, D. D.	Allen University	Columbia, S. C.
Benjamin Sloan, LL. D.	South Carolina College	Do.
Rev. Francis Y. Pressly, D. D.	Erskine College	Duwest, S. C.
Rev. Edward M. Poteat, D. D.	Furman University	Greenville, S. C.
James A. B. Scherer, Ph. D.	Newberry College	Newberry, S. C.
Rev. L. M. Dunton, D. D.	Claffin University	Orangeburg, S. C.
Henry N. Snyder, A. M.	Wofford College	Spartanburg, S. C.
Rev. C. H. French, D. D.	Huron College	Huron, S. Dak.
Rev. Thomas Nicholson, D. D.	Dakota University	Mitchell, S. Dak.
Rev. I. P. Patch	Redfield College	Redfield, S. Dak.
Garrett Droppers, A. B.	University of South Dakota	Vermilion, S. Dak.
Rev. H. K. Warren, LL. D.	Yankton College	Yankton, S. Dak.
Rev. J. H. Race, D. D.	Grant University	Athens, Tenn.

III.—COLLEGE PRESIDENTS—Continued.

1.—Colleges for men and coeducational colleges of liberal arts—Continued.

Name of president.	University or college.	Address.
F. P. Ramsay.....	King College.....	Bristol, Tenn.
G. F. Nicolassen, Ph. D., vice-chancellor.	Southwestern Presbyterian University.	Clarksville, Tenn.
G. M. Savage, LL. D.....	Southwestern Baptist University....	Jackson, Tenn.
M. D. Jeffries, M. D.....	Carson and Newiman College.....	Jefferson City, Tenn.
Rev. R. W. McGranahan, D. D.....	Knoxville College.....	Knoxville, Tenn.
Brown Ayres, Ph. D.....	University of Tennessee.....	Do.
D. E. Mitchell, A. B.....	Cumberland University.....	Lebanon, Tenn.
J. B. Reed.....	Bethel College.....	McKenzie, Tenn.
Rev. Samuel T. Wilson, D. D.....	Maryville College.....	Maryville, Tenn.
Brother Icarion.....	Christian Brothers College.....	Memphis, Tenn.
H. R. Garrett, A. M.....	Milligan College.....	Milligan, Tenn.
Rev. James G. Merrill, D. D.....	Fisk University.....	Nashville, Tenn.
Rev. Peter B. Guernsey, A. M.....	Roger Williams University.....	Do.
James D. Porter, LL. D.....	University of Nashville.....	Do.
James H. Kirkland, LL. D., chancellor.	Vanderbilt University.....	Do.
Rev. John A. Kumler, D. D.....	Walden University.....	Do.
B. Lawton Wiggins, LL. D., vice-chancellor.	University of the South.....	Sewanee, Tenn.
W. N. Billingsley, A. M.....	Burritt College.....	Spencer, Tenn.
Rev. J. E. Lowery, A. M.....	Hiwassee College.....	Sweetwater, Tenn.
O. C. Hulvey, A. M.....	Sweetwater College.....	Do.
Rev. S. A. Cole, D. D.....	Greenville and Tusculum College....	Tusculum, Tenn.
Rev. James T. Cooter, A. M.....	Washington College.....	Washington College, Tenn.
Rev. John T. Boland, C. S. C.....	St. Edward's College.....	Austin, Tex.
Wm. L. Prather, LL. D.....	University of Texas.....	Do.
J. H. Grove, A. M.....	Howard Payne College.....	Brownwood, Tex.
Rev. George H. MacAdam, D. D.....	Fort Worth University.....	Fort Worth, Tex.
Rev. H. A. Boaz, A. M.....	Polytechnic College.....	Do.
Rev. D. Murphy, S. J.....	St. Mary's University.....	Galveston, Tex.
Robert S. Hyer, LL. D., regent.....	Southwestern University.....	Georgetown, Tex.
W. I. Gibson, A. M.....	Burleson College.....	Greenville, Tex.
Rev. M. W. Dogan, Ph. D.....	Wiley University.....	Marshall, Tex.
Ely V. Zollars, LL. D.....	Texas Christian University.....	North Waco, Tex.
Rev. Thomas S. Clyde, D. D.....	Austin College.....	Sherman, Tex.
Samuel P. Brooks, LL. D.....	Baylor University.....	Waco, Tex.
Rev. William J. Laws, D. D.....	Paul Quinn College.....	Do.
Archelaus E. Turner, Ph. D.....	Trinity University.....	Waxahachie, Tex.
James H. Linford, B. S.....	Brigham Young College.....	Logan, Utah.
Joseph T. Kingsbury, Ph. D.....	University of Utah.....	Salt Lake City, Utah.
Rev. George Bailey, Ph. D.....	Westminster College.....	Do.
Rev. M. H. Buckham, LL. D.....	University of Vermont.....	Burlington, Vt.
Ezra Brainerd, LL. D.....	Middlebury College.....	Middlebury, Vt.
Charles H. Spooner, LL. D.....	Norwich University.....	Northfield, Vt.
Robert E. Blackwell, LL. D.....	Randolph-Macon College.....	Ashland, Va.
W. B. Yount.....	Bridgewater College.....	Bridgewater, Va.
E. A. Alderman, LL. D.....	University of Virginia.....	Charlottesville, Va.
Rev. R. G. Waterhouse, D. D.....	Emory and Henry College.....	Emory, Va.
Rev. J. W. Rosebro, D. D.....	Fredericksburg College.....	Fredericksburg, Va.
W. H. Whiting, A. M., acting.....	Hampden-Sidney College.....	Hampden-Sidney, Va.
George H. Denny, Ph. D.....	Washington and Lee University.....	Lexington, Va.
F. W. Boatwright, LL. D.....	Richmond College.....	Richmond, Va.
M. MacVicar, LL. D.....	Virginia Union University.....	Do.
Rev. John A. Morehead, D. D.....	Roanoke College.....	Salem, Va.
L. G. Tyler, LL. D.....	College of William and Mary.....	Williamsburg, Va.
A. C. Jones, Ph. D.....	Vashon College.....	Burton, Wash.
Thomas F. Kane, Ph. D.....	University of Washington.....	Seattle, Wash.
Rev. Francis C. Dillon, S. J.....	Gonzaga College.....	Spokane, Wash.
Edwin M. Randall.....	University of Puget Sound.....	Tacoma, Wash.
F. B. Gault, Ph. D.....	Whitworth College.....	Do.
Rev. S. B. L. Penrose, A. B.....	Whitman College.....	Walla Walla, Wash.
D. W. Shaw, A. M.....	Morris Harvey College.....	Barboursville, W. Va.
T. E. Cramblet.....	Bethany College.....	Bethany, W. Va.
D. B. Purinton, LL. D.....	West Virginia University.....	Morgantown, W. Va.
Rev. S. Plantz, Ph. D.....	Lawrence University.....	Appleton, Wis.
Rev. Edward D. Eaton, LL. D.....	Beloit College.....	Beloit, Wis.
Charles R. Van Hise, Ph. D.....	University of Wisconsin.....	Madison, Wis.
Rev. Wm. C. Daland, D. D.....	Milton College.....	Milton, Wis.
Rev. M. J. F. Albrecht.....	Concordia College.....	Milwaukee, Wis.
Rev. Alexander J. Burrowes, S. J.....	Marquette College.....	Do.
Rev. H. A. Muehlmeier, D. D.....	Mission House.....	Plymouth, Wis.
Rev. Richard C. Hughes, D. D.....	Ripon College.....	Ripon, Wis.
Rev. F. A. Ernst.....	Northwestern University.....	Watertown, Wis.
Frederick M. Tisdell, Ph. D.....	University of Wyoming.....	Laramie, Wyo.

III.—COLLEGE PRESIDENTS—Continued.

2.—Colleges for women.

Name of president.	College.	Address.
C. J. Owens, LL. D.	Anniston College.	Anniston, Ala.
Miss Mary N. Moore.	Athens Female College.	Athens, Ala.
Rev. Robert G. Patrick, D. D.	Judson College.	Marion, Ala.
Jas. D. Wade, A. M.	Marion Female Seminary.	Do.
Rev. T. Peyton Walton.	Alabama Synodical College for Women.	Talladega, Ala.
Rev. B. F. Giles, A. M.	Central Female College.	Tuscaloosa, Ala.
R. J. Holston, A. M.	Tuscaloosa Female College.	Do.
John Massey, LL. D.	Alabama Conference Female College.	Tuskegee, Ala.
W. W. Rivers, A. M.	Central Baptist College.	Conway, Ark.
Mrs. C. T. Mills.	Mills College.	Mills College, Cal.
Sister Mary Bernardine.	College of Notre Dame.	San José, Cal.
Sister Georgiana.	Trinity College.	Washington, D. C.
Mrs. M. A. Lipscomb.	Lucy Cobb Institute.	Athens, Ga.
Rev. Homer Bush, A. M.	Southern Female College.	College Park, Ga.
Rev. Thomas L. Bryan.	Andrew Female College.	Cuthbert, Ga.
C. H. S. Jackson, A. M.	Dalton Female College.	Dalton, Ga.
A. W. Van Hoose; H. J. Pearce	Monroe Female College.	Forsyth, Ga.
Rufus W. Smith, A. M.	Brenau College.	Gainesville, Ga.
M. W. Hatton, A. M.	Lagrange Female College.	Lagrange, Ga.
Du Pont Guerry.	Southern Female College.	Do.
T. J. Simmons, A. M.	Wesleyan Female College.	Macon, Ga.
Rev. Joseph R. Harker, Ph. D.	Shorter College.	Rome, Ga.
Rev. C. W. Leffingwell, D. D., rector.	Illinois Woman's College.	Jacksonville, Ill.
Julia H. Gulliver, Ph. D.	St. Mary's School.	Knoxville, Ill.
Rev. F. R. Millsbaugh, D. D.	Rockford College.	Rockford Ill.
Rev. Benj. F. Cabell.	College of the Sisters of Bethany.	Topeka, Kans.
John C. Acheson, A. M.	Potter College.	Bowling Green, Ky.
Th. Smith, A. M.	Caldwell College.	Danville, Ky.
Rev. Edmund Harrison, LL. D.	Beaumont College.	Harrodsburg, Ky.
Mrs. L. W. St. Clair.	Bethel Female College.	Hopkinsville, Ky.
Geo. J. Ramsey, LL. D.	Hamilton Female College.	Lexington, Ky.
Rev. C. C. Fisher, A. M.	Sayre Female Institute.	Do.
Mrs. J. B. Skinner.	Millersburg Female College.	Millersburg, Ky.
J. Byron La Rue.	Jessamine Female Institute.	Nicholasville, Ky.
B. E. Atkins, A. M.	Owensboro Female College.	Owensboro, Ky.
Rev. F. W. Lewis, D. D.	Logan Female College.	Russellville, Ky.
G. W. Thigpen, A. M.	Sullivan Collegiate Institute.	Clinton, La.
T. S. Shigh, A. M.	Louisiana Female College.	Keatchie, La.
Brandt V. B. Dixon, LL. D.	Mansfield Female College.	Mansfield, La.
Rev. Wilbur F. Berry.	H. Sophie Newcomb Memorial College.	New Orleans, La.
O. H. Perry, A. B.	Maine Wesleyan Seminary and Female College.	Kents Hill, Me.
Mary Theophila.	Westbrook Seminary.	Woodfords, Me.
Rev. John F. Goucher, LL. D.	Notre Dame of Maryland.	Baltimore, Md.
J. H. Apple, A. M.	Woman's College of Baltimore.	Do.
Bruce L. Kershner, A. M.	Woman's College.	Frederick, Md.
Rev. J. H. Turner, D. D.	Kee Mar College.	Hagerstown, Md.
C. C. Bragdon, LL. D.	Maryland College for Young Ladies.	Lutherville, Md.
Le Baron R. Briggs, LL. D.	Lasell Seminary for Young Women.	Auburndale, Mass.
Rev. L. Clark Seelye, LL. D.	Radcliffe College.	Cambridge, Mass.
Mary E. Woolley, Litt. D.	Smith College.	Northampton, Mass.
Miss Caroline Hazard, Litt. D.	Mount Holyoke College.	South Hadley, Mass.
B. G. Lowrey, A. M.	Wellesley College.	Wellesley, Mass.
Rev. I. W. Cooper, D. D.	Blue Mountain Female College.	Blue Mountain, Miss.
Rev. John L. Johnson, LL. D.	Whitworth Female College.	Brookhaven, Miss.
Hon. A. A. Kincannon.	Hillman College.	Clinton, Miss.
J. A. Sanderson, principal.	Industrial Institute and College.	Columbus, Miss.
L. T. Fitzhugh, A. M.	Central Mississippi Institute.	French Camp, Miss.
J. L. Logan.	Belhaven College for Young Ladies.	Jackson, Miss.
J. W. Beeson, A. M.	McComb Female Institute.	McComb, Miss.
Hon. James R. Preston, A. M.	Meridian Female College.	Meridian, Miss.
Mrs. Thida D. Moore.	Stanton College for Young Ladies.	Natchez, Miss.
Rev. L. S. Jones, A. M.	Chickasaw Female College.	Pontotoc, Miss.
Mrs. W. T. Moore.	Port Gibson Female College.	Port Gibson, Miss.
Rev. J. R. Pentuff, Ph. D.	Christian College.	Columbia, Mo.
Rev. Hiram D. Groves.	Stephens College.	Do.
Rev. J. M. Spencer.	Howard Payne College.	Fayette, Mo.
Edward W. White, A. M.	Synodical Female College.	Fulton, Mo.
Alfred F. Smith.	Lexington College for Young Women.	Lexington, Mo.
C. M. Williams, A. M.	Central Female College.	Do.
J. W. Million, A. M.	Liberty Ladies College.	Liberty, Mo.
Mrs. V. A. C. Stoekard.	Hardin College.	Mexico, Mo.
Rev. George F. Ayres, Ph. D.	Cotley College for Young Ladies.	Nevada, Mo.
Rev. George M. Ward, LL. D.	Lindenwood College for Women.	St. Charles, Mo.
Truman J. Backus, LL. D.	Wells College.	Aurora, N. Y.
	Packer Collegiate Institute.	Brooklyn, N. Y.

III.—COLLEGE PRESIDENTS—Continued.

2.—Colleges for women—Continued.

Name of president.	College.	Address.
Rev. A. C. Mackenzie, LL. D.	Elmira College.	Elmira, N. Y.
Laura D. Gill, A. M., dean.	Barnard College.	New York, N. Y.
Rev. J. M. Taylor, LL. D.	Vassar College.	Poughkeepsie, N. Y. .
Rev. C. B. King, A. M.	Elizabeth College.	Charlotte, N. C.
S. A. Wolff, A. M.	Gaston College.	Dallas, N. C.
Mrs. Lucy H. Robertson.	Greensboro Female College.	Greensboro, N. C.
A. J. Bolin, A. M.	Claremont Female College.	Hickory, N. C.
M. S. Davis, A. M.	Louisburg Female College.	Louisburg, N. C.
John C. Scarborough, A. B.	Chowan Baptist Female Institute.	Murfreesboro, N. C.
F. P. Hobgood, A. M.	Oxford Female Seminary.	Oxford, N. C.
Rev. R. T. Vann, D. D.	Baptist Female University.	Raleigh, N. C.
Rev. John H. Clewell, Ph. D.	Salem Female Academy and College.	Salem, N. C.
Rev. John H. Thomas, D. D.	Oxford College.	Oxford, Ohio.
Lilian W. Johnson, Ph. D.	Western College.	Do.
Miss Mary Evans, Litt. D.	Lake Erie College.	Painesville, Ohio.
Rev. J. W. Knappenberger, A. M.	Allentown College for Women.	Allentown, Pa.
Rev. J. Max Hark, D. D.	Moravian Seminary and College for Women.	Bethlehem, Pa.
Rev. S. B. Linhart, A. M.	Blairsville College.	Blairsville, Pa.
Miss M. Carey Thomas, LL. D.	Bryn Mawr College.	Bryn Mawr, Pa.
M. H. Reaser, Ph. D.	Wilson College.	Chambersburg, Pa.
E. E. Campbell, Ph. D.	Irving Female College.	Mechanicsburg, Pa.
Rev. Samuel A. Martin, D. D.	Pennsylvania College for Women.	Pittsburg, Pa.
Rev. W. W. Daniel, D. D.	Columbia Female College.	Columbia, S. C.
Miss Euphemia McClintock, A. B.	Presbyterian College for Women.	Do.
Rev. James Boyce.	Due West Female College.	Duewest, S. C.
Lee D. Lodge, Ph. D.	Limestone College.	Gaffney, S. C.
A. S. Townes.	Greenville College for Women.	Greenville, S. C.
Edward C. James, Litt. D.	Greenville Female College.	Do.
Rev. John O. Willson, D. D.	Lander Female College.	Greenwood, S. C.
Robert P. Pell, A. B.	Converse College.	Spartanburg, S. C.
Rev. B. G. Clifford, Ph. D.	Clifford Seminary.	Union, S. C.
Rev. W. M. Dyer, A. M.	Sullins College.	Bristol, Tenn.
.....	Brownsville Female College.	Brownsville, Tenn.
T. E. Allen.	Tennessee Female College.	Franklin, Tenn.
Z. K. Griffin, B. S.	Howard Female College.	Gallatin, Tenn.
Rev. A. B. Jones, LL. D.	Memphis Conference Female Institute.	Jackson, Tenn.
Miss V. O. Wardlaw, A. M.	Soule Female College.	Murfreesboro, Tenn.
Mrs. J. O. Rust.	Boscobel College.	Nashville, Tenn.
J. D. Blanton, LL. D.	Ward Seminary.	Do.
.....	Synodical Female College.	Rogersville, Tenn.
Rev. C. T. Carlton, A. B.	Carlton College.	Bonham, Tex.
W. A. Wilson, D. D.	Baylor Female College.	Belton, Tex.
James E. Willis.	Chappell Hill Female College.	Chappellhill, Tex.
Rev. J. E. Harrison, A. B.	San Antonio Female College.	San Antonio, Tex.
A. Q. Nash, C. E.	Mary Nash College.	Sherman, Tex.
.....	Martha Washington College.	Abingdon, Va.
Miss Kate M. Hunt, A. B.	Stonewall Jackson Institute.	Do.
J. T. Henderson, A. M.	Southwest Virginia Institute.	Bristol, Va.
Rev. H. W. Tribble, D. D.	Rawlins Institute.	Charlottesville, Va.
R. E. Hatton, Ph. D.	Roanoke College of Danville.	Danville, Va.
Miss Matty L. Cooke.	Hollins Institute.	Hollins, Va.
W. W. Smith, LL. D.	Randolph-Macon Woman's College.	Lynchburg, Va.
Rev. J. J. Scherer, D. D.	Marion Female College.	Marion, Va.
Arthur K. Davis, A. M.	Southern Female College.	Petersburg, Va.
Rev. James Nelson, D. D.	Woman's College.	Richmond, Va.
Rev. R. L. Telford, D. D.	Lewisburg Female Institute.	Lewisburg, W. Va.
Miss Ellen C. Sabin, A. M.	Milwaukee-Downer College.	Milwaukee, Wis.

3.—Schools of technology.

Charles C. Thach, A. M.	Alabama Polytechnic Institute.	Auburn, Ala.
Barton O. Aylesworth, LL. D.	Colorado Agricultural College.	Fort Collins, Colo.
Victor C. Alderson, Se. D.	State School of Mines.	Golden, Colo.
Rev. R. W. Stimson, A. M.	Connecticut Agricultural College.	Storrs, Conn.
Lyman Hall, LL. D.	State School of Technology.	Atlanta, Ga.
Rev. Frank W. Gunsaulus, D. D.	Armour Institute of Technology.	Chicago, Ill.
W. E. Stone, Ph. D.	Purdue University.	Lafayette, Ind.
Carl L. Mees, Ph. D.	Rose Polytechnic Institute.	Terre Haute, Ind.
Rev. Albert B. Storms, D. D.	Iowa College of Agriculture and Mechanic Arts.	Ames Iowa.
.....	Kansas Agricultural College.	Manhattan, Kans.
Ernest R. Nichols, A. M.	United States Naval Academy.	Annapolis, Md.
Rear-Admiral J. H. Sands, U. S. N., superintendent.	Massachusetts Agricultural College.	Amherst, Mass.
H. S. Pritchett, LL. D.	Massachusetts Institute of Technology.	Boston, Mass.

III.—COLLEGE PRESIDENTS—Continued.

3.—Schools of technology—Continued.

Name of president.	College.	Address.
Edmund A. Engler, LL. D.	Worcester Polytechnic Institute	Worcester, Mass.
J. L. Snyder, Ph. D.	Michigan Agricultural College	Agricultural College, Mich.
F. W. McNair, B. S.	Michigan College of Mines	Houghton, Mich.
J. C. Hardy, LL. D.	Mississippi Agricultural and Mechanical College.	Agricultural College, Miss.
W. H. Lanier, A. B.	Alcorn Agricultural and Mechanical College.	Westside, Miss.
James M. Hamilton, M. S.	Montana College of Agriculture and Mechanic Arts.	Bozeman, Mont.
Nathan R. Leonard, A. M.	Montana State School of Mines.	Butte, Mont.
W. D. Gibbs, M. S.	New Hampshire College of Agriculture and Mechanic Arts.	Durham, N. H.
Alexander C. Humphreys, Sc. D.	Stevens Institute of Technology	Hoboken, N. J.
Luther Foster, M. S. A.	New Mexico College of Agriculture and Mechanic Arts.	Mesilla Park, N. Mex.
Charles R. Keyes, Ph. D., director.	New Mexico School of Mines	Socorro, N. Mex.
W. S. Aldrich, M. E., director.	Clarkson School of Technology.	Potsdam, N. Y.
Palmer C. Ricketts, C. E.	Rensselaer Polytechnic Institute.	Troy, N. Y.
Gen. A. L. Mills, U. S. A., supt.	United States Military Academy.	West Point, N. Y.
James B. Dudley, A. M.	Agricultural and Mechanical College for the Colored Race.	Greensboro, N. C.
George T. Winston, LL. D.	North Carolina College of Agriculture and Mechanic Arts.	West Raleigh, N. C.
J. H. Worst, LL. D.	North Dakota Agricultural College ..	Agricultural College, N. Dak.
Charles S. Howe, Ph. D.	Case School of Applied Science.	Cleveland, Ohio.
Angelo C. Scott, A. M.	Oklahoma Agricultural and Mechanical College.	Stillwater, Okla.
Thomas M. Gatch, Ph. D.	Oregon Agricultural College.	Corvallis, Oreg.
K. L. Butterfield, A. M.	Rhode Island College of Agriculture and Mechanic Arts.	Kingston, R. I.
Asbury Coward, LL. D., supt.	South Carolina Military Academy.	Charleston, S. C.
P. H. Mell, Ph. D.	Clemson Agricultural College.	Clemson College, S. C.
Rev. James Chalmers, LL. D.	South Dakota Agricultural College.	Brookings, S. Dak.
Robert L. Slagle, Ph. D.	State School of Mines.	Rapid City, S. Dak.
David F. Houston, LL. D.	Agricultural and Mechanical College of Texas.	College Station, Tex.
W. J. Kerr, Sc. D.	Agricultural College of Utah.	Logan, Utah.
J. M. McBryde, LL. D.	Virginia Agricultural and Mechanical College and Polytechnic Institute.	Blacksburg, Va.
Scott Shipp, LL. D., supt.	Virginia Military Institute.	Lexington, Va.
E. A. Bryan, LL. D.	Washington Agricultural College and School of Science.	Pullman, Wash.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES.

Name of professor.	University or college.	Address.
Edward F. Buchner, Ph. D.	University of Alabama.	University, Ala.
Wm. S. Johnson, Ph. D.	University of Arkansas.	Fayetteville, Ark.
Elmer E. Brown, Ph. D.	University of California.	Berkeley, Cal.
A. H. Chamberlain, A. M.	Throop Polytechnic Institute.	Pasadena, Cal.
E. P. Chamberley, A. M.	Leland Stanford Junior University.	Stanford University, Cal.
Sanford Bell, A. M.	University of Colorado.	Boulder, Colo.
.....	Colorado College.	Colorado Springs, Colo.
D. E. Phillips, Ph. D.	University of Denver.	University Park, Colo.
E. H. Sneath, LL. D.	Yale University.	New Haven, Conn.
Lewis B. Moore, Ph. D.	Howard University.	Washington, D. C.
L. W. Buchholz.	Florida State College.	Tallahassee, Fla.
T. J. Wooster, Ph. D.	University of Georgia.	Athens, Ga.
George A. Towms, A. M.	Atlanta University.	Atlanta, Ga.
.....	North Georgia Agricultural College.	Dahlonega, Ga.
Arthur W. Rowell.	Clark University.	South Atlanta, Ga.
M. F. Reed, B. S.	University of Idaho.	Moscow, Idaho.
George H. Locke, A. M.	University of Chicago.	Chicago, Ill.
A. R. Taylor, Ph. D., president.	James Millikin University.	Decatur, Ill.
O. B. Clark, A. M.	Eureka College.	Eureka, Ill.
Herbert F. Fisk, LL. D.	Northwestern University.	Evanston, Ill.
J. L. Goodknight, D. D., president	Lincoln College.	Lincoln, Ill.
Edwin G. Dexter, Ph. D.	University of Illinois.	Urbana, Ill.
W. S. Reese, D. D.	Westfield College.	Westfield, Ill.
J. A. Bergström, Ph. D.	Indiana University.	Bloomington, Ind.
Thomas S. Lowden, Ph. D.	De Pauw University.	Greencastle, Ind.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES—Continued.

Name of professor.	University or college.	Address.
Arthur K. Rogers, Ph. D.	Butler College	Indianapolis, Ind.
Burt W. Ayres, Ph. D.	Taylor University	Upland, Ind.
J. P. Hugget, Ph. B.	Coe College	Cedar Rapids, Iowa.
William F. Barr, Ph. B.	Drake University	Des Moines, Iowa.
A. E. Bennett, A. M.	Upper Iowa University	Fayette, Iowa.
Charles E. Shelton, LL. D., pres.	Simpson College	Indianola, Iowa.
F. E. Bolton, Ph. D.	State University of Iowa	Iowa City, Iowa.
Elias Handy, A. B.	Iowa Wesleyan University	Mount Pleasant, Iowa.
Geo. H. Betts, Ph. M.	Cornell College	Mount Vernon, Iowa.
Guy G. Sears, A. M.	Central University of Iowa	Pella, Iowa.
E. A. Brown, A. M.	Morningside College	Sioux City, Iowa.
Robert J. Peters, A. M.	Midland College	Atchison, Kans.
Lillian Scott, Ph. B.	Baker University	Baldwin, Kans.
William Rinck, A. M.	Emporia College	Emporia, Kans.
W. S. Reese, Ph. M.	Campbell College	Holton, Kans.
A. S. Olin, A. M.	University of Kansas	Lawrence, Kans.
Vivian Henmon, A. M.	Bethany College	Lindsborg, Kans.
R. A. Schweger, A. B.	Ottawa University	Ottawa, Kans.
Albert H. King.	Kansas Wesleyan University	Salina, Kans.
Otto W. Newby, A. B.	Cooper College	Sterling, Kans.
	Fairmount College	Wichita, Kans.
B. W. Truesdell, A. B.	Friends University	Do.
Carrie P. Herndon, Ph. B.	Southwest Kansas College	Winfield, Kans.
John W. Dinsmore, A. M.	Berea College	Berea, Ky.
Ruric N. Roark, Ph. D.	Agricultural and Mechanical College	Lexington, Ky.
J. C. Willis, Ph. D.	Kentucky University	Do.
R. W. Perkins, Ph. D., pres.	Leland University	New Orleans, La.
Charles E. Young, A. M.	Morgan College	Baltimore, Md.
W. A. Garrison, A. M.	New Windsor College	New Windsor, Md.
Paul H. Hanus, B. S.	Harvard University	Cambridge, Mass.
George E. Dawson, Ph. D.	Mount Holyoke College	South Hadley, Mass.
Anna J. McKeag, Ph. D.	Wellesley College	Wellesley, Mass.
W. H. Burnham, Ph. D.	Clark University	Worcester, Mass.
Rufus C. Bentley, A. M., dean	Collegiate Department, Clark University	Do.
Sarah J. Knott, M. S.	Adrian College	Adrian, Mich.
Joseph W. Ewing, A. M.	Alma College	Alma, Mich.
W. H. Payne, LL. D.	University of Michigan	Ann Arbor, Mich.
Charles H. Curney, A. M.	Hillsdale College	Hillsdale, Mich.
J. M. Vander Meulen, A. M.	Hope College	Holland, Mich.
Herbert L. Stetson, LL. D.	Kalamazoo College	Kalamazoo, Mich.
E. G. Lancaster, Ph. D., pres.	Olivet College	Olivet, Mich.
George F. James, Ph. D.	University of Minnesota	Minneapolis, Minn.
M. Wahlstrom, Ph. D.	Gustavus Adolphus College	St. Peter, Minn.
J. G. Deupree, LL. D.	University of Mississippi	University, Miss.
Albert R. Hill, Ph. D.	University of Missouri	Columbia, Mo.
Edgar J. Swift, Ph. D.	Washington University	St. Louis, Mo.
George B. Randels, Ph. B.	Bellevue College	Bellevue, Nebr.
Josie Y. Osterhout.	Cotner University	Bethany, Nebr.
Charles C. Lewis	Union College	College View, Nebr.
John F. Crawford, A. M.	Grand Island College	Grand Island, Nebr.
G. W. A. Luckey, Ph. D.	University of Nebraska	Lincoln, Nebr.
Wm. R. Jackson, A. M.	Nebraska Wesleyan University	University Place, Nebr.
Romanzo Adams, Ph. M.	Nevada State University	Reno, Nev.
Herman H. Horne, Ph. D.	Dartmouth College	Hanover, N. H.
E. R. Payson, Ph. D.	Rutgers College	New Brunswick, N. J.
Charles E. Hodgkin, B. Ped.	University of New Mexico	Albuquerque, N. Mex.
Charles B. Clark, A. M.	Alfred University	Alfred, N. Y.
E. N. Henderson, A. M.	Adelphi College	Brooklyn, N. Y.
W. H. Squires, Ph. D.	Hamilton College	Clinton, N. Y.
M. S. Read, Ph. D.	Colgate University	Hamilton, N. Y.
Charles De Garino, Ph. D.	Cornell University	Ithaca, N. Y.
James E. Russell, LL. D., pres.	Columbia University (Teachers' College).	New York, N. Y.
T. M. Balliet, Ph. D., pres.	New York University	Do.
George M. Fortes, A. M.	University of Rochester	Rochester, N. Y.
J. R. Street, Ph. D.	Syracuse University	Syracuse, N. Y.
Marcus C. S. Noble	University of North Carolina	Chapel Hill, N. C.
W. R. Connors, A. B.	Livingstone College	Salisbury, N. C.
Darius Eatman, A. M.	Wake Forest College	Wake Forest, N. C.
Joseph Kennedy, A. M.	University of North Dakota	University, N. Dak.
John B. Bowman, A. M.	Mount Union College	Alliance, Ohio.
Henry G. Williams, A. M.	Ohio University	Athens, Ohio.
	University of Cincinnati	Cincinnati, Ohio.
David R. Major, Ph. D.	Ohio State University	Columbus, Ohio.
Edward A. Miller, A. B.	Oberlin College	Oberlin, Ohio.
Harvey C. Minnich, A. M.	Miami University	Oxford, Ohio.
J. E. McMullan, Ph. M.	Scio College	Scio, Ohio.
	Heidelberg University	Tiffin, Ohio.
Sarah C. B. Scarborough, M. Pd.	Wilberforce University	Wilberforce, Ohio.
Mary E. Reynolds, B. S.	Willamette University	Salem, Oreg.

IV.—PROFESSORS OF PEDAGOGY AND HEADS OF DEPARTMENTS OF PEDAGOGY IN UNIVERSITIES AND COLLEGES—Continued.

Name of professor.	University or college.	Address.
G. T. Ettinger, Ph. D.	Muhlenberg College	Allentown, Pa.
Wm. L. Gooding, Ph. D.	Dickinson College	Carlisle, Pa.
Geo. L. Omwake, A. M.	Ursinus College	Collegeville, Pa.
James H. Leuba, Ph. D.	Bryn Mawr College	Bryn Mawr, Pa.
C. M. Thomas, Ph. D.	Grove City College	Grove City, Pa.
J. H. Brumbaugh	Juniata College	Huntingdon, Pa.
Francis B. Brandt, Ph. D.	Central High School	Philadelphia, Pa.
M. G. Brumbaugh, LL. D.	University of Pennsylvania	Do.
William Noetting, A. M.	Susquehanna University	Selinsgrove, Pa.
W. B. Jacobs, A. M.	Brown University	Providence, R. I.
Patterson Wardlaw, A. B.	South Carolina College	Columbia, S. C.
G. Le Roy Noyes, A. B.	Clafin University	Orangeburg, S. C.
Levi A. Stout, A. M.	Dakota University	Mitchell, S. Dak.
George M. Smith, A. M.	University of South Dakota	Vermillion, S. Dak.
Henry K. Warren, LL. D.	Yankton College	Yankton, S. Dak.
P. P. Claxton, A. M.	University of Tennessee	Knoxville, Tenn.
Mary Stephens, A. M.	Roger Williams University	Nashville, Tenn.
Albert T. Barrett, LL. D.	University of Nashville	Do.
W. S. Sutton, A. M.	University of Texas	Austin, Tex.
Albert F. Armstrong, A. M.	Texas Christian University	North Waco, Tex.
Frederick Eby, Ph. D.	Baylor University	Waco, Tex.
Mosiah Hall, Ph. M.	Brigham Young College	Logan, Utah.
Wm. M. Stewart, M. Di.	University of Utah	Salt Lake City, Utah.
Wilmot B. Lane, Ph. D.	Randolph-Macon Woman's College	Lynchburg, Va.
Hugh S. Bird, A. B.	College of William and Mary	Williamsburg, Va.
Albert H. Yoder, A. B.	University of Washington	Seattle, Wash.
W. D. Turner, A. M.	Bethany College	Bethany, W. Va.
Jasper N. Deahl, A. M.	West Virginia University	Morgantown, W. Va.
Almon W. Burr, A. M.	Beloit College	Beloit, Wis.
M. Vincent O'Shea, B. L.	University of Wisconsin	Madison, Wis.
Steven S. Stockwell, Ph. B.	University of Wyoming	Laramie, Wyo.

V.—PRINCIPALS OF NORMAL SCHOOLS.

Public normal schools.

Location.	Name of institution.	Principal.
ALABAMA.		
Florence	State Normal College	Marshall C. Wilson.
Jacksonville	do.	C. W. Dugette.
Livingston	Alabama Normal College for Girls	Miss Julia S. Tutwiler.
Montgomery	State Normal School for Colored Students	Wm. B. Paterson.
Normal	Agricultural and Mechanical College for Negroes	W. H. Council.
Troy	State Normal College	E. M. Shackelford.
ARIZONA.		
Flagstaff	Northern Arizona Normal School	A. N. Taylor.
Tempe	Tempe Normal School of Arizona	A. J. Matthews.
ARKANSAS.		
Mount Ida	Mount Ida Normal Academy	John H. Pierce.
Pine Bluff	Branch Normal College	Isaac Fisher
CALIFORNIA.		
Chico	California State Normal School	Chas. C. Van Liew.
Los Angeles	State Normal School	Edward T. Pierce.
San Diego	do.	Samuel T. Black.
San Francisco	do.	Frederick Burk.
San Jose	do.	Morris Elmer Dailey.
COLORADO.		
Greeley	Colorado State Normal School	Z. X. Snyder.
CONNECTICUT.		
Bridgeport	Bridgeport Training School	Besse E. Howes.
New Britain	Normal Training School	Marcus White.
New Haven	State Normal Training School	Arthur B. Morrill
Willimantic	do.	George P. Phenix.
DISTRICT OF COLUMBIA.		
Washington	Washington Normal School No. 1	Anne M. Goding.
Do.	Washington Normal School No. 2	Lucy E. Moten.
FLORIDA.		
De Funiak Springs	Florida State Normal School	H. E. Bennett.
Tallahassee	Florida State Normal and Industrial College.	Nathan B. Young.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
GEORGIA.		
Athens.....	State Normal School.....	E. C. Branson.
Cornelia.....	Cornelia Normal Institute.....	C. H. Clyde.
Douglas.....	Southern Normal Institute.....	J. Walter Hendricks.
Milledgeville.....	Georgia Normal and Industrial College.....	J. Harris Chappell.
Savannah.....	State Industrial College.....	R. R. Wright.
IDAHO.		
Albion.....	State Normal School.....	Horace Ellis.
Lewiston.....	do.....	Geo. H. Black.
ILLINOIS.		
Carbondale.....	Southern Illinois State Normal University.....	D. B. Parkinson.
Charleston.....	Eastern Illinois State Normal School.....	L. C. Lord.
Chicago, Station O.....	Chicago Normal School.....	Arnold Tompkins.
Dekalb.....	Northern Illinois State Normal School.....	John W. Cook.
Normal.....	Illinois State Normal University.....	David Felmley.
Macomb.....	Western Illinois State Normal School.....	J. W. Henninger.
INDIANA.		
Indianapolis.....	Indianapolis Normal School.....	M. E. Nicholson.
Terre Haute.....	Indiana State Normal School.....	William W. Parsons.
IOWA.		
Cedarfalls.....	Iowa State Normal School.....	Homer H. Seerley.
Woodbine.....	Woodbine Normal and Commercial School.....	M. A. Reed.
KANSAS.		
Emporia.....	State Normal School.....	Jasper N. Wilkinson.
Hays.....	Western Branch State Normal School.....	William S. Picken.
KENTUCKY.		
Frankfort.....	State Normal and Industrial Institute for Colored Persons.....	James S. Hathaway.
Louisville.....	Louisville Normal School.....	W. J. McConathy.
LOUISIANA.		
Natchitoches.....	Louisiana State Normal School.....	B. C. Caldwell.
New Orleans.....	New Orleans Normal School.....	Miss Margaret C. Hanson.
MAINE.		
Castine.....	Eastern State Normal School.....	Albert F. Richardson.
Farmington.....	Farmington State Normal School.....	George C. Purington.
Fort Kent.....	Madawaska Training School.....	Mary P. Nowland.
Gorham.....	State Normal School.....	W. J. Corthell.
Springfield.....	Springfield Normal School.....	Miss Ava H. Chadbourne.
MARYLAND.		
Baltimore.....	Maryland State Normal School.....	E. B. Prettyman.
MASSACHUSETTS.		
Boston.....	Boston Normal School.....	Wallace C. Boyden.
Do.....	Massachusetts Normal Art School.....	George H. Bartlett.
Bridgewater.....	State Normal School.....	Albert G. Boyden.
Fitchburg.....	do.....	John G. Thompson.
Framingham.....	do.....	Henry Whittemore.
Hyannis.....	do.....	Wm. A. Baldwin.
Lowell.....	do.....	F. F. Coburn.
North Adams.....	do.....	F. F. Murdock.
Salem.....	do.....	W. P. Beckwith.
Westfield.....	do.....	Clarence A. Brodeur.
Worcester.....	do.....	E. Harlow Russell.
MICHIGAN.		
Detroit.....	Washington Normal School.....	Chas. L. Spain.
Marquette.....	State Normal School.....	Dwight B. Waldo.
Mount Pleasant.....	Central State Normal School.....	Chas. T. Grawn.
Ypsilanti.....	Michigan State Normal School.....	Lewis H. Jones.
MINNESOTA.		
Duluth.....	State Normal School.....	E. W. Bohannon.
Mankato.....	do.....	Chas. H. Cooper.
Moorhead.....	do.....	Frank A. Weld.
St. Cloud.....	do.....	W. A. Shoemaker.
St. Paul.....	Teachers' Training School.....	Miss B. M. Phelan.
Winona.....	State Normal School.....	J. F. Millsbaugh.
MISSISSIPPI.		
Paris.....	Paris Normal School.....	D. G. Carpenter.
Sherman.....	Mississippi Normal Institute.....	D. C. Langston.
Walnut Grove.....	Mississippi Central Normal School.....	John Rundle.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
MISSOURI.		
Cape Girardeau.....	State Normal School.....	W. S. Dearmont.
Kirksville.....	State Normal School (first district).....	John R. Kirk.
Warrensburg.....	State Normal School (second district).....	
MONTANA.		
Dillon.....	Montana Normal School.....	Henry H. Swain.
NEBRASKA.		
Peru.....	Nebraska State Normal School.....	W. A. Clark.
NEW HAMPSHIRE.		
Plymouth.....	State Normal School.....	J. E. Klock.
NEW JERSEY.		
Jersey City.....	Teachers' Training School.....	Joseph H. Brensinger.
Newark.....	Newark Normal and Training School.....	W. S. Willis.
Paterson.....	Paterson Normal Training School.....	Jesse D. Burks.
Trenton.....	New Jersey State Normal and Model Schools.....	James M. Green.
NEW MEXICO.		
Las Vegas.....	New Mexico Normal University.....	Edmund J. Vert.
Silver City.....	Normal School of New Mexico.....	C. M. Light.
NEW YORK.		
Albany.....	New York State Normal College.....	Wm. J. Milne.
Brookport.....	State Normal and Training School.....	Charles T. McFarlane.
Brooklyn.....	Training School for Teachers.....	Emma L. Johnston.
Buffalo.....	Buffalo Normal School (State).....	James M. Cassety.
Cohoes.....	Cohoes Training School.....	Mary E. Wilcox.
Cortland.....	State Normal and Training School.....	Francis J. Cheney.
Fredonia.....	do.....	F. B. Palmer.
Geneseo.....	Geneseo State Normal School.....	John M. Milne.
Jamaica.....	Normal and Training School.....	A. C. McLaughlan.
New Paltz.....	State Normal School.....	Myron T. Scudder.
New York.....	New York Training School for Teachers.....	A. S. Downing.
Do.....	Normal College of the City of New York.....	Thomas Hunter.
Oneonta.....	State Normal School.....	Percy I. Bugbee.
Oswego.....	Oswego State Normal and Training School.....	Isaac B. Poucher.
Plattsburg.....	State Normal School.....	Geo. K. Hawkins.
Potsdam.....	State Normal and Training School.....	Thomas B. Stowell.
Rochester.....	Rochester Training School.....	Richard A. Searing.
Syracuse.....	Syracuse High School, Normal Department.....	G. A. Lewis.
NORTH CAROLINA.		
Elizabeth City.....	State Colored Normal School.....	P. W. Moore.
Fayetteville.....	do.....	E. E. Smith.
Franklinton.....	Albion Academy and State Normal School.....	Rev. J. A. Savage.
Greensboro.....	State Normal and Industrial School.....	Charles D. McIver.
Plymouth.....	Plymouth State Normal School.....	Chas. M. Eppes.
Salisbury.....	State Normal School.....	J. O. Crosby.
NORTH DAKOTA.		
Mayville.....	State Normal School.....	Joseph Carhart.
Valley City.....	do.....	George A. McFarland.
OHIO.		
Akron.....	Perkins Normal School.....	Lee R. Knight.
Canfield.....	Northeastern Ohio Normal School.....	Chas. O. Allaman.
Cleveland.....	Cleveland Normal and Training School.....	J. W. McGilvrey.
Columbus.....	Columbus Normal School.....	Margaret W. Sutherland.
Dayton.....	Dayton Normal School.....	Grace A. Greene.
Fayette.....	Fayette Normal University.....	Judson Liepp.
Toledo.....	Toledo Normal Training School.....	Mrs. E. C. Hard.
OKLAHOMA.		
Alva.....	Northwestern Territorial Normal School.....	T. W. Conway.
Edmond.....	Territorial Normal School.....	Frederick H. Umholtz.
Langston.....	Colored Agricultural and Normal University.....	Inman E. Page.
Weatherford.....	Southwestern State Normal School.....	J. R. Campbell.
OREGON.		
Ashland.....	Southern Oregon State Normal School.....	Benj. F. Mulkey.
Drain.....	Central Oregon State Normal School.....	W. H. Dempster.
Monmouth.....	State Normal School.....	Edwin De Vore Ressler.
Weston.....	Eastern State Normal School.....	Robert Carver French.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
PENNSYLVANIA.		
Bloomsburg.....	State Normal School.....	Judson P. Welsh.
California.....	Southwestern State Normal School..	Theo. B. Noss.
Clarion.....	Clarion State Normal School.....	Samuel Weir.
East Stroudsburg.....	East Stroudsburg State Normal School.	E. L. Kemp.
Edinboro.....	State Normal School.....	John F. Bigler.
Indiana.....	Indiana Normal School of Pennsylvania.	D. J. Waller, jr.
Kutztown.....	Keystone State Normal School.....	A. C. Rothermel.
Lockhaven.....	Central State Normal School.....	J. R. Flickinger.
Mansfield.....	Mansfield State Normal School.....	Andrew T. Smith.
Millersville.....	First Pennsylvania State Normal School.	E. Oram Lyte.
Philadelphia.....	Philadelphia Normal School for Girls.	J. M. Willard.
Pittsburg.....	Pittsburg High School, Normal Department.	Jane Ralston.
Shippensburg.....	Cumberland Valley State Normal School.	G. M. D. Eckels.
Slippery Rock.....	Slippery Rock State Normal School..	Albert E. Maltby.
Westchester.....	State Normal School.....	George M. Phillips.
RHODE ISLAND.		
Providence.....	Rhode Island State Normal School...	Charles S. Chapin.
SOUTH CAROLINA.		
Rockhill.....	Winthrop Normal College.....	D. B. Johnsen.
SOUTH DAKOTA.		
Madison.....	State Normal School.....	W. H. H. Beadle.
Spearfish.....	do.....	F. L. Cook.
Springfield.....	do.....	J. S. Frazee.
TENNESSEE.		
Nashville.....	Peabody Normal School.....	James D. Porter.
TEXAS.		
Denton.....	North Texas Normal School.....	J. S. Kendall.
Detroit.....	Detroit Normal School.....	W. A. Dean.
Huntsville.....	Sam Houston Normal Institute.....	H. C. Pritchett.
Prairie View.....	Prairie View State Normal and Industrial College.	Ed. L. Blackshear.
UTAH.		
Cedar City.....	Southern Branch of the State Normal School.	Nathan T. Porter.
VERMONT.		
Castleton.....	State Normal School.....	Philip R. Leavenworth.
Johnson.....	do.....	John L. Alger.
Randolph Center.....	do.....	Charles H. Morrill.
VIRGINIA.		
Farmville.....	State Female Normal School.....	J. L. Jarman.
Hampton.....	Hampton Normal and Agricultural Institute.	H. B. Frissell.
Petersburg.....	Virginia Normal and Industrial Institute.	J. H. Johnston.
WASHINGTON.		
Bellingham.....	State Normal School.....	Edward T. Mathes.
Cheney.....	do.....	Harry M. Shafer.
Ellensburg.....	do.....	W. E. Wilson.
WEST VIRGINIA.		
Fairmont.....	State Normal School.....	W. L. McCowan.
Glenville.....	do.....	John C. Shaw.
Huntington.....	Marshall College, State Normal School.	Lawrence J. Corby.
Institute.....	West Virginia Colored Institute.....	J. McH. Jones.
Shepherdstown.....	Shepherd College, State Normal School.	J. G. Knutti.
West Liberty.....	West Liberty State Normal School...	Lorain Fortney.
WISCONSIN.		
Menominee.....	Dunn County Teachers' Training School.	W. L. Morrisson.
Milwaukee.....	State Normal School.....	Charles McKenney.
Oshkosh.....	do.....	R. H. Ha'sey.
Platteville.....	do.....	D. McGregor.
River Falls.....	River Falls State Normal School...	W. J. Brier.
Stevens Point.....	State Normal School.....	Theron B. Pray.
Superior.....	Superior State Normal School.....	I. C. McNeill.
Wausau.....	Marathon County Training School...	O. E. Wells.
Whitewater.....	State Normal School.....	Albert Salisbury.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Private normal schools.

Location.	Name of institution.	Principal
ALABAMA.		
Cullman.....	Normal Department, Polytechnic College and Ladies' Institute.	S. A. Fetter.
Falkville.....	Falkville Normal College.....	E. L. Hays.
Fort Payne.....	North Alabama College.....	Edwin R. Eldridge.
Huntsville.....	Central Alabama Academy.....	B. Henson Ball.
Mobile.....	Emerson Normal Institute.....	Rev. A. T. Burnell.
Snow Hill.....	Snow Hill Normal and Industrial Institute.	W. J. Edwards.
Tuskegee.....	Tuskegee Normal and Industrial Institute.	B. T. Washington.
ARKANSAS.		
Pea Ridge.....	Pea Ridge Masonic College.....	S. C. Parish.
Sulphur Rock.....	Sulphur Rock College.....	W. B. Knight.
COLORADO.		
Denver.....	Denver Normal and Preparatory School.	Fred. Dick.
DISTRICT OF COLUMBIA.		
Washington.....	Kindergarten Normal Training School.	Miss Susan P. Pollock.
FLORIDA.		
Jasper.....	Jasper Normal Institute.....	R. D. Hall.
Orange Park.....	Orange Park Normal and Manual Training School.	Rev. Walter S. Eaton.
GEORGIA.		
Augusta.....	Haines Manual and Industrial Institute.	Miss Lucy C. Laney.
Macon.....	Ballard Normal School.....	George C. Burrage.
Social Circle.....	Negro Normal and Industrial School.	James A. Love.
Thomasville.....	Allen Normal and Industrial School.	Abbie B. Howland.
Waynesboro.....	Haven Normal Academy.....	W. H. Bryan.
ILLINOIS.		
Addison.....	German Evangelical Lutheran Teachers' Seminary.	E. A. W. Krauss.
Hoopeston.....	Greer College.....	J. M. Clary.
Oregon.....	Wells School for Teachers.....	H. W. Sullivan.
Rushville.....	Rushville Normal and Business College.	Maxwell Kennedy.
INDIANA.		
Corydon.....	Ohio Valley Normal School.....	E. S. Hallett.
Danville.....	Central Normal College.....	A. J. Kinnaman.
Indianapolis.....	Indiana Kindergarten and Primary Normal Training School.	Eliza A. Blaker.
Marion.....	Marion Normal College.....	C. W. Boucher.
Rochester.....	Rochester Normal University.....	Wm. H. Banta.
Valparaiso.....	Northern Indiana Normal School.....	H. B. Brown.
IOWA.		
Denison.....	Denison Normal School.....	W. C. Van Ness.
Lemars.....	Lemars Normal College.....	Herman H. Thoren.
Newton.....	Newton Normal College.....	G. W. Wormley.
Perry.....	Perry Normal School.....	Will M. Tarr.
Shenandoah.....	Western Normal College, Shenandoah Commercial Institute and Musical Conservatory.	J. M. Hussey.
KANSAS.		
Salina.....	Salina Normal University.....	Charles Swisher.
KENTUCKY.		
Hardinsburg.....	Breckinridge Normal College.....	Andrew Driskell.
Hazard.....	Hazard Baptist Institute.....	A. S. Petrey.
Lexington.....	Chandler Normal School.....	Fannie J. Webster.
Middleburg.....	Middleburg Normal College.....	J. W. Davis.
Morehead.....	Morehead Normal School.....	F. C. Button.
Waddy.....	Central Normal College.....	E. J. Paxton.
MAINE.		
Lee.....	Lee Normal Academy.....	Chas. M. Teague.
MARYLAND.		
Baltimore.....	Baltimore Normal School (colored).....	George Harrison.
MASSACHUSETTS.		
Boston (1069 Boylston).....	Froebel School, Kindergarten Normal Classes.	Annie C. Rust.
Boston.....	Kindergarten Training School.....	Lucy Wheelock.
Waltham.....	Notre Dame Training School.....	Sister Constantine.
MICHIGAN.		
Owosso.....	Oakside School.....	Mrs. L. E. Gould.
Petoskey.....	Graves Normal Academy.....	M. O. Graves.

V.—PRINCIPALS OF NORMAL SCHOOLS—Continued.

Private normal schools—Continued.

Location.	Name of institution.	Principal.
MINNESOTA.		
Madison.....	Normal School of the United Norwegian Lutheran Church.	O. Lokensgaard.
New Ulm.....	Dr. Martin Luther College.....	John Schaller.
MISSISSIPPI.		
Shelby.....	Shelby Normal School.....	J. M. Williamson.
Tougaloo.....	Normal Department Tougaloo University.	Frank G. Woodworth.
MISSOURI.		
Chillicothe.....	Chillicothe Normal Business and Shorthand College.	Allen Moore.
Stanberry.....	Stanberry Normal School.....	F. L. Maxwell.
NEBRASKA.		
Fremont.....	Fremont Normal School.....	W. H. Clemmons.
Santee.....	Santee Normal Training School.....	Alfred L. Riggs.
Wayne.....	Nebraska Normal College.....	J. M. Pile.
NORTH CAROLINA.		
Asheville.....	Normal and Collegiate Institute.....	Rev. Thos. Lawrence.
Charlotte.....	Rowan Normal Industrial Institute.	C. S. Somerville.
Enfield.....	Jos. K. Brick Agricultural, Industrial, and Normal School.	T. S. Inboden.
Henderson.....	Henderson Normal Institute.....	J. A. Cotton.
Liberty.....	Liberty Normal College.....	Thos. C. Amick.
Raleigh.....	St. Augustine's School.....	Rev. A. B. Hunter.
Wilmington.....	Gregory Normal Institute.....	Geo. A. Woodard.
Winton.....	Waters Normal Institute.....	C. S. Brown.
OHIO.		
Ada.....	Ohio Northern University.....	L. A. Belt.
Dayton.....	St. Mary's Academy.....	Brother Michael.
Fostoria.....	Ohio Normal Training School.....	Wm. E. Ashcraft.
Lebanon.....	National Normal University.....	J. Oscar Creager.
New Philadelphia.....	John P. Kuhn's Normal School.....	John P. Kuhn.
Woodville.....	Teachers' Seminary.....	Rev. E. Gerfen.
PENNSYLVANIA.		
Muncy.....	Lycoming County Normal School....	H. A. Spotts.
SOUTH CAROLINA.		
Charleston.....	Avery Normal Institute.....	Morrison A. Holmes.
Frogmore.....	Penn Normal and Industrial School..	Miss Ellen Murray.
Greenwood.....	Brewer Normal School.....	Rev J. M. Robinson.
Lancaster.....	Lancaster Normal and Industrial Institute.	M. D. Lee.
SOUTH DAKOTA.		
Sioux Falls.....	Lutheran Normal School.....	Rev. A. Mikkelsen.
TENNESSEE.		
Chattanooga.....	Chattanooga Normal University....	Samuel Hixson.
Dickson.....	Tennessee Normal School.....	T. B. Loggins.
Fountain City.....	Tennessee Normal College.....	W. S. Bryan.
Hornbeak.....	West Tennessee Normal College.....	W. L. Willingham.
Huntington.....	Southern Normal University.....	A. E. Booth.
Memphis.....	Le Moyne Normal Institute.....	A. J. Steele.
Morristown.....	Morristown Normal Academy.....	Judson S. Hill.
TEXAS.		
Commerce.....	East Texas Normal College.....	W. L. Mayo.
Cumby.....	Independent Normal College.....	Geo. A. Curlee.
VIRGINIA.		
Reliance.....	Shenandoah Normal College.....	Rev. W. W. Carson.
Richmond.....	Hartshorn Memorial College.....	Lyman B. Tefft.
WEST VIRGINIA.		
Harpers Ferry.....	Storer College.....	Henry T. McDonald.
WISCONSIN.		
Milwaukee.....	National German-American Teachers Seminary.	Max Griebisch.
St. Francis.....	Catholic Normal School of the Holy Family.	Rev. M. J. Lochmes.



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